

**SAN ANTONIO RIVER AUTHORITY
TEXAS**

PROGRAM BUDGETS

July 1, 2011 - June 30, 2012

Presented to the
Board of Directors

<u>Name</u>	<u>Title</u>	<u>County</u>
Názirite Rubén Pérez		Bexar County, District 1
Roberto G. Rodríguez	Secretary	Bexar County, District 2
Michael W. Lackey, PE		Bexar County, District 3
Thomas G. Weaver		Bexar County, District 4
Sally Buchanan	Vice-Chairman	Bexar County, At Large
Hector R. Morales	Executive Member	Bexar County, At Large
Terry E. Baiamonte	Treasurer	Goliad County
Adair R. Sutherland		Goliad County
Gaylon J. Oehlke	Chairman	Karnes County
H. B. Ruckman III		Karnes County
John J. Flieller		Wilson County
A. D. Kollodziej, Jr.	Executive Member	Wilson County

Management

<u>Name</u>	<u>Title</u>
Suzanne B. Scott	General Manager
Stephen T. Graham	Assistant General Manager
Steven J. Raabe	Director of Technical Services
John A. Chisholm III	Director of Operations
Larry O. Anderson	Director of Support Services
Janet Pollock	Director of Human Resources
Michael Gonzales	Deputy Director of Technical Services
James Blair	Watershed Operations Manager
Dale Bransford	Park Services Manager
Rudy Farias	Water Resources & Community Development Manager
Art Herrera	Information Technology Manager
Claude Harding	Real Estate Manager
Steve Lusk	Environmental Sciences Manager
Sharon McCoy-Huber	Financial Services Manager
Linda Munoz	Human Resource Manager
Russell Persyn	Watershed Management Manager
Steven Schauer	External Communications Manager

**SAN ANTONIO RIVER AUTHORITY
PROGRAM BUDGETS
TABLE OF CONTENTS**

Budget Message i

Definitions 0-1

Processes 0-2

Charts 0-4

Summaries..... 0-6

Capital Project Implementation Program

Bexar County Capital Improvement Projects 1-1

Calaveras 6 Dam Rehabilitation Project 1-2

Calaveras 8 Dam Rehabilitation Project 1-3

Medina Dam Improvement Project..... 1-4

Mission Reach Maintenance Facility Project 1-5

San Antonio River Improvement Program

Eagleland Reach Project 1-6

Mission Reach Project 1-7

Museum Reach (Park Segment) Project 1-8

Museum Reach (Urban Segment) Project..... 1-9

Community Outreach & Education Program

Witte Center for Rivers Project..... 2-1

Efforts 2-2

Natural Resource Protection Program

Characterization of Sediment Loads in Lower San Antonio River Project ... 3-1

Clean Rivers Program 2009 Grant Project..... 3-2

Clean Rivers Program 2011 Grant Project..... 3-3

Digitizing San Antonio Bay Data Project..... 3-4

Emerging Contaminants Project 3-5

Estuary Response Project..... 3-6

Instream Flows Planning Project 3-7

Laboratory Information Management System Upgrade Project..... 3-8

San Antonio Basin Nutrient Loading Survey Project 3-9

San Antonio River Authority Stream Monitoring Project 3-10

Texas Instream Flows Program (TIFP)

Instream Verification Project..... 3-11

Study Design & Implementation Project 3-12

Upper San Antonio River Watershed Protection Plan Revision #1Project . 3-13

Water Quality Database and Website Interface Project..... 3-14

Efforts 3-15

**SAN ANTONIO RIVER AUTHORITY
PROGRAM BUDGETS
TABLE OF CONTENTS**

Nature Based Park Program

Branch Property Site Development Project	4-1
Helton San Antonio River Nature Park Project	4-2
Loop 1604 River Access Site Development Project.....	4-3
SASPAMCO Paddling Trail River Access Project	4-4
Efforts	4-5

Sustainable Watersheds Implementation Program

Leon Creek Holistic Watershed Master Plan Project	5-1
Medina River Holistic Watershed Master Plan Project	5-2
Non-Point Runoff Modeling and Best Mgmt.Practices Strategies Project....	5-3
Olmos Basin Alliance Storm Water Best Management Practices Project.....	5-4
Salado Creek Watershed Master Plan Project	5-5
San Antonio River Improvement Project Outfalls Assessment Project.....	5-6
Stream Restoration E. Salatrillo Creek Project.....	5-7
Stream Restoration Huebner Creek Project – Leon Valley	5-8
Stream Restoration Huebner Creek Project – SAWS	5-9
Stream Restoration Support Project.....	5-10
Upper San Antonio River Holistic Watershed Master Plan Project	5-11
Westside Creeks Restoration Project	5-12
Efforts	5-13

Utilities Program

Alamo Community College District First Responder Wastewater Treatment Plant Project	6-1
City Metering for Salatrillo Wastewater Treatment Plant Project.....	6-2
Creekwood Water System Improvements Project	6-3
East Village Outfall Project	6-4
Graytown Road Wastewater System Development Project.....	6-5
Joint Base San Antonio Utility Privatization Project.....	6-6
Martinez II Wastewater Treatment Plant Expansion Project.....	6-7
Old Martinez Outfall & Parallel Rehabilitation Project	6-8
Randolph Air Force Base Year 8 (2011) Project	6-9
Randolph Air Force Base Year 9 (2012) Project	6-10
Salatrillo Beltpress Replacement Project.....	6-11
Salatrillo Collection Wholesale System Inflow and Infiltration Project	6-12
Salatrillo Reuse Project.....	6-13
Salatrillo Wastewater Treatment Plant Expansion Project	6-14
SARA Wastewater Collection System Inflow and Infiltration Project	6-15
SARA Wastewater Vulnerability & Security Assessment Project	6-16
Upsize New Diversion Structure Pipe at Upper Martinez Project.....	6-17
Utilities Supervisory Ctrl. & Data Acquisition (SCADA) System Project .	6-18
Efforts	6-19

**SAN ANTONIO RIVER AUTHORITY
PROGRAM BUDGETS
TABLE OF CONTENTS**

Water Resource Planning and Supply Program

Goliad County Water System Corporation Project.....	7-1
Kenedy Desalination Study Project	7-2
South Central Texas Regional Water Planning Group –Texas Water Development Board 2011 2nd Biennium Project	7-3
South Central Texas Regional Water Planning Group –Texas Water Development Board 2016 Fourth Cycle Project.....	7-4
Efforts	7-5

Watershed Maintenance and Dam Safety Program

Dam Inundation Zone Study.....	8-1
Flood Debris Cleanup 2012 Project.....	8-2
Efforts	8-3

Watershed Modeling and Planning Program

Bexar County Flood Warning and Flood Alert Project	9-1
Cooperating Technical Partners (CTP) Development Project	9-2
Digital Data Model Repository (D2MR) Project.....	9-3
Edwards Nueces Feasibility Study Project	9-4
Environmental Monitoring System Project	9-5
US Geological Survey Coletto Creek Ground Water Surface Water Project .	9-6
US Geological Survey Paired Watershed Study Project.....	9-7
San Antonio Bay EDYS Model Development Project	9-8
Wilson, Karnes, Goliad Floodplain Master Plan Assistance Project.....	9-9
Efforts	9-10

Stand Alone Projects & Efforts

Arc Geographical Information System Server Implementation Project	10-1
Historical Geographical Information System Database Project	10-2
Real Estate Geographical Information System Support Project	10-3
Wastewater Billing and Geographical Information System Assessment Project	10-4
Efforts	10-5

Appendix

Projects List in Alphabetical Order	11-1
Abbreviations & Acronyms	11-4
References	11-5



SAN ANTONIO
RIVER AUTHORITY

Water Brings Us Together

May 18, 2011

To the San Antonio River Authority Board of Directors:

In accordance with the provisions of Article VI, Section 2, of the Bylaws of the San Antonio River Authority (River Authority), submitted herewith for your consideration is the Annual Budget for fiscal year 2011/12 for the period July 1, 2011 to June 30, 2012.

For the fiscal year 2011/12, the total budget is \$123,596,931, with a General Fund budget of \$23,419,828. The proposed fiscal year 2011/12 budget is reflected in three volumes to address the different needs of the reader(s). The first book is the Executive Summaries and Five Year Service & Financial Plan. The second book is the Annual Budget Detail; this reports the detail breakdown of all River Authority funds. The third book is Program Budgets; this explains to the reader the projects the River Authority is currently active or anticipated to be involved in.

The proposed fiscal year 2011/12 budget continues to support the advancement of projects, programs and efforts by programmatic area to better link the River Authority's expenditures to the approved strategic plan and the organizational mission, goals and objectives as approved by the Board of Directors.

Strategic Planning

In August 2010, the River Authority's executive and management staff developed a 12 month strategic plan that identified key initiatives and action objectives that were to be accomplished within the fiscal year 2010/11 year. The plan was built on our corporate philosophy of *Good-to-Great* and our commitment to setting measurable goals with tangible results. That 12 month plan has been updated for fiscal year 2011/12. This updated strategic plan will be the River Authority's detailed road map and barometer on how we are progressing and "making a difference" within our district, through the projects and efforts in our departments and programs. The 12 month strategic plan is not an exhaustive list of every project, initiative, and opportunity being worked on by the River Authority, but instead it is a representation of key efforts that we hope are indicative of how the River Authority will advance its mission that year.

The strategic plan outlines the three-year targets we hope to achieve or further develop. Those targets are identified as Key Thrusts and Strategic Opportunities. Currently the thrusts include the following:

- Generate lasting and recognized improvements to the health of the San Antonio River Watershed

EXECUTIVE
COMMITTEE



CHAIRMAN
Gaylon J. Oehlke

VICE CHAIRMAN
Sally Buchanan

SECRETARY
Roberto G. Rodríguez

TREASURER
Terry E. Baiamonte

MEMBER AT LARGE
A.D. Kollodziej, Jr.
Hector R. Morales



BOARD OF DIRECTORS

BEXAR COUNTY
DISTRICT 1
Názimte Rubén Pérez

DISTRICT 2
Roberto G. Rodríguez

DISTRICT 3
Michael W. Lackey, P.E.

DISTRICT 4
Thomas G. Weaver

AT LARGE
Sally Buchanan
Hector R. Morales

WILSON COUNTY
John Flieller
A.D. Kollodziej, Jr.

KARNES COUNTY
Gaylon J. Oehlke
H.B. Ruckman III

GOLIAD COUNTY
Terry E. Baiamonte
Adair R. Sutherland



GENERAL MANAGER
Suzanne B. Scott

- Enhance community appreciation for and access to the San Antonio River and its tributaries
- Strengthen and develop expertise at all levels
- Diversify and leverage funding sources
- Build employee dedication to the River Authority’s vision and values
- Expand public and private partnerships.

The Strategic Opportunities include

- Secure a storm water / MS4 permit role
- Explore and promote sustainable development
- Advance Joint Base SA partnerships
- Obtain funding commitments to Westside Creeks Restoration Project.

The Board has focused policy decisions on expanding the River Authority’s service to meet the needs of the basin, while remaining accountable to the efficient and effective allocation of limited funding resources. The River Authority is also promoting sustainability in the projects and programs it undertakes. Projects are designed to promote lasting solutions which improve the watersheds of the basin and leverage resources toward shared environmental stewardship. Projects and programs are aimed at promoting appreciation for the river and tributaries by enhancing recreational accessibility and enjoyment and restoring degrading ecosystems, expanding the utility system to support economic development and continuing to shape the expertise of the River Authority staff to effectively meet the needs of the communities within the district.

Achieving Results through our Programs and Projects

“A great organization is one that delivers superior performance and makes a distinctive impact over a long period of time.”

Jim Collins, author Good to Great.

Through projects, programs and agency efforts, the River Authority is strategically focused on sustainable solutions that balance the shared demands on the river’s resources. Developing sustainable solutions requires a long-term, holistic, watershed-based approach that integrates activities internal and external to the River Authority including the application of science, engineering, land management, education, regulation, and legislation.

The River Authority is focused on results and showing progress on our objectives. In that regard every department, every program, and every employee at the River Authority establishes quarterly objectives that are clearly identified and focused toward accomplishing our agency goals and initiatives. These quarterly goals are also known as Key Actions and Accountabilities (KAAs). The KAAs are aligned with the strategic plan and are tracked and reported to the River Authority’s Management Team and Board of Directors.

2011/12 Operational Objectives

To be “Leaders in Watershed Solutions,” we believe we must be results oriented. To obtain results and to hold ourselves accountable, several Key Initiatives have been developed for the River Authority as a whole. Each department and program has measurable objectives that align with and support the attainment of these Key Initiatives. The Key Initiatives in 2011/12 are as follows:

1. Increase non-Maintenance & Operation tax revenues by 5% and develop an action plan for incremental increases through fiscal year 2014/15
2. Secure at least two new partner projects for the River Authority to manage for reimbursement
3. Evaluate and develop cost effective operations and maintenance (O & M) strategies for Park Service Operations to meet quality service objectives and River Health Index (RHI) targets with nature park and new paddling recreation sites
4. Maximize Cooperating Technical Partners (CTP)/Letters of Map Revision (LOMR)/Bexar Regional Watershed Management (BRWM) role to reach RHI targets
5. Define Environmental Sciences Department future lab capabilities to best support the River Authority’s objectives and maximize operational efficiencies
6. Achieve RHI target reductions in bacteria and improvements to habitat on stream segments and advance analysis of water quality data to mitigate other environmental threats to the watershed
7. Identify and pursue target areas for the River Authority to advance operational and environmental innovations
8. Optimize, standardize and document technical business processes including improving the effectiveness and use of the Project Management System
9. Target community assistance funding to produce quantifiable results and value to meet RHI targets
10. Quantify community satisfaction with the River Authority’s services
11. Secure a key role/niche for the River Authority in implementing strategies that improve and protect environmental flows
12. Include at least two natural design channel projects and Low Impact Development (LID) pilot project and funding for Westside Creeks restoration in the City of San Antonio 2012 Bond Program

13. Finalize Mission Reach maintenance and recreational standards

14. Enhance the performance management program to strengthen leadership development and employee communication.

Key Performance Indicators (KPIs)

The River Health Index (RHI) is one of the River Authority's KPIs that will be used to see whether the River Authority's programs and efforts "are making a difference" and by how much. The RHI that was developed is a composite score derived by a summation of measured values in the areas of public safety, environmental protection, public awareness, and public access to the San Antonio River and its tributaries. Ten-year targets are established for these measured values along with the projections we hope to reach between now and 2020. The RHI for 2010 was base-lined in the January to February 2011 timeframe.

The Financial Leveraging Index (FLI) was designed to provide information indicating the extent to which the financial resources of the River Authority are being leveraged. Being prudent financial managers is making sure that we generate the maximum amount of service from all available resources. The FLI tracks how the River Authority's direct funding is leveraged with other funding resources to advance basin-wide goals. The FLI will focus on that portion of our funding over which the staff exerts the greatest influence.

Projects/Programs

Nine programs are assigned to Program Leaders with authority to manage and direct the projects in their portfolio. Program Leaders develop annual objectives and report progress and are accountable to the Executive Staff on achieving programmatic results.

Sources of Funds

The extensive portfolio of programs, projects, and efforts requires significant resources to fund. The River Authority's ad valorem operations and maintenance tax funds only about a quarter of the budget. The River Authority continually looks to leverage and optimize existing revenue sources with funds from external sources. The River Authority receives revenues from several sources of funds to support the activities in the Annual Budget. These sources include federal appropriations, interlocal agreements, fund balances, grants and private donations, and the River Authority's ad valorem operations and maintenance tax. Each funding source is discussed below:

Federal and State Appropriations

The River Authority has taken great advantage of federal appropriations to support its wastewater and flood control functions. There exists a potential to significantly increase funds available from existing and untapped sources of federal and state funds. The

Annual Budget does not reflect an increased level of funding from these sources significantly affecting the bottom line in the short term, but it is believed the increases in planning activity proposed will increase the flow of federal and state funds for water-related programs and projects in the district. Regionalization of public functions and services fosters increased levels of federal and state participation. For example, in the State's grant program for recreation facilities, the region-wide recreation plan proposed will improve evaluation scores and thereby the chances of individual city or county recreation projects to be funded by the state program. In addition, entities such as the Federal Emergency Management Agency (FEMA) and the Texas Water Development Board (TWDB), and others, desire to develop and implement water-related programs with regional entities, particularly entities with jurisdiction over river basins and associated watersheds. These entities realize that the hydrology and hydraulics of water on a watershed basis are more significant in water issues than the boundaries of local jurisdictions.

Interlocal Agreements

The River Authority prides itself on partnerships. The River Authority has formalized these partnerships at the federal, state, and local levels through various contracts and interlocal agreements. These agreements will continue to be a foundation revenue source for the River Authority. Examples are the interlocal agreements with the City of San Antonio and Bexar County whereby the River Authority provides certain technical services and project management for flood control, river improvement and water quality projects. Other examples include the Regional Water Resources Development Group (RWRDG), i.e. the joint effort to buy Edwards Aquifer water rights administered by the River Authority, and the SB-1 Regional Planning (Region L) process, both of which are funded by the program participants.

Fund Balances

These may be used to support new activities. The River Authority has adopted a funds management policy to describe the protocol for use of the fund balances including maintenance of reserves to protect the River Authority's financing capability and to provide operating reserves. The Annual Budget recommends that the fund balances be used to fund capital projects rather than operations and maintenance activities. In fiscal year 2010/11, as the River Authority expanded operations and maintenance activity on the Museum Reach, Eagleland and Mission Reach of the San Antonio River Improvements Project, the board established an operation and maintenance reserve fund to offset unexpected costs associated with project maintenance.

Grants and Private Donations

During the past three fiscal years, the River Authority has increased its application for and receipt of grant funding and will continue to seek this source of funding for activities consistent with the Annual Budget. In addition, many charitable trusts and other sources of private funds have recreation-related or environmental protection, enhancement, and

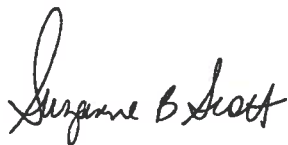
education activities as key elements. The River Authority works closely with the San Antonio River Foundation to direct private funding toward projects and activities that advance our mission and stewardship of the resources of the San Antonio River. The improved planning tools and products, e.g. master plans that will be developed according to the Annual Budget, will improve the River Authority's opportunities to access private donations.

Maintenance and Operations Tax

Many of the River Authority's activities, such as flood control and water quality protection, do not have revenue sources and are typically supported as a governmental function by an ad valorem tax. The River Authority is authorized to collect an ad valorem tax at a maximum of \$0.02 per \$100 of assessed value. The tax may be used for operations and maintenance activities, which include all activities other than direct capital investment in infrastructure. The fiscal year 2011/12 budget is based on a tax rate of \$0.017370 which is a 3.66% increase for the average homestead owner from the \$0.016652 rate assessed in fiscal year 2010/11. The final tax rate calculation will be prepared when the certified tax rolls are received by the River Authority in late July. The Board of Directors will hold a public hearing and vote on the tax rate in late August or early September.

In all that the River Authority does, we strive to provide valued public service, to be accountable to our constituents, and to be good fiscal stewards of the public resources with which we are entrusted. The budget, programs, projects and activities presented in these documents are provided to promote quality service and responsiveness to the needs of the community we serve.

Respectfully submitted,



SUZANNE B. SCOTT
General Manager



SHARON L. McCOY-HUBER
Financial Services Manager



REHA CIMEN
Project Management Administrator

Definitions

Processes

Charts

Summaries



Definitions

Programs, projects, and efforts have specific definitions as used in this book, and it is important to provide those definitions so all stakeholders have a common understanding. As a reference, the hierarchy at the River Authority is that programs are the highest grouping and projects and efforts are grouped under programs.

Program

A program is a group of projects managed in a coordinated way to obtain benefits not available from managing them individually. (Programs can have an end date or can be ongoing.)

Project

A project is a temporary effort that has a start and end date and will produce a unique product or service. The River Authority project threshold is \$50,000 or above estimated value (including out-years) and 6 months or longer in duration. All programs and projects are listed in the River Authority's project management system.

Effort

An effort is an activity that does not fit into the project definition and requires more than 250 hours of River Authority staff resources and is estimated to cost \$200,000 or more of River Authority funds.



Processes

Especially for project-driven organizations like the River Authority, where the majority of the business is projects, managing the projects consistently and effectively is critical to managing the entrusted public funds and successfully serving our constituents. For this purpose there are various internal processes and tools that take a project from the first step, which we call the idea stage, to completion.

Project Proposal Process

The majority of the River Authority's projects start with an idea unless projects are mandated by law. During the budgeting process, departments put forth their project ideas for the upcoming fiscal year. These project ideas are scrutinized by what is called the Project Evaluation Process.

Project Evaluation Process

Evaluation of each project is done at the idea level. As a result, all projects are evaluated against the River Authority's hedgehog concept,* goals and other relevant priorities, and each project has an established Priority Score. The projects that are published in this book have been through this process. The River Authority's hedgehog and goals are listed below:

Hedgehog:

- What is the River Authority best at in the world?
- What is the River Authority deeply passionate about?
- What drives the River Authority's economic engine?

Goals:

- Exemplify environmental leadership, stewardship and expertise.
- Enhance community appreciation for the environmental resources of the San Antonio River and its tributaries.
- Deliver valued public service.
- Advance a sustainable environment.
- Develop successful employees.

* Hedgehog concept: Terminology used by Jim Collins in his book *Good to Great*. Please see the references at the end of this book for further information.



Project Management Process

Contemporary project-driven organizations are implementing project management best practices and disciplines to manage their projects. The River Authority initiated the Project Management Program in 2002 to achieve a level of maturity that is right for the organization. The scope of the program included the implementation of project management best practices, common processes and tools for all River Authority-managed projects. The River Authority's portfolio of projects includes engineering projects, utilities projects, watershed management projects, parks projects, water resources projects, information technology projects, study projects, and support projects.

The River Authority now has processes to take these projects from the idea stage, to prioritize them, and to implement those that are consistent with the hedgehog and meet the agency's goals and objectives. As a result, the River Authority is already enjoying various benefits of the process including efficiency of resources, operational synergy and productivity. Also, all the project management processes and templates were gathered in one concise collaborative Project Portfolio Management (PPM) software application.

Now programs and projects are accessible by all stakeholders, are executed cost-effectively and are managed consistently. As new project managers and project team-members are assigned to a project or transitioned from one project to another, there is a common understanding of how the project will work through its life-cycle, which in turn minimizes the learning curve related to handoffs. Also, with everyone being familiar with the common project management processes and tools, informed decisions are being made, thereby eliminating guesswork at all levels of the organization.

The River Authority continuously reviews its programs and projects and when there is a need programs, projects and efforts are rearranged or consolidated. Currently projects are consolidated under nine programs with some stand-alone projects and efforts. Program Leaders responsible for managing these programs are assigned for each program.

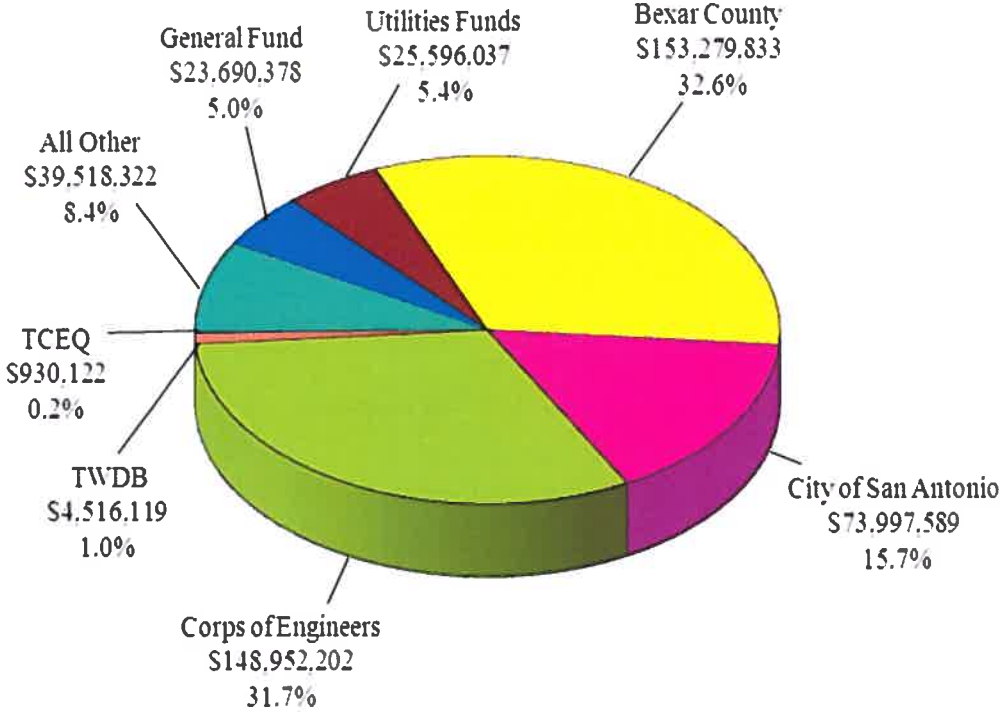
The River Authority utilizes the Project Management Institute's (PMI) project management process and best practices. As established by PMI, the following chart illustrates the project life cycle of the River Authority's projects.



Charts

Below are charts related to the River Authority’s projects portfolio (charts include estimated figures):

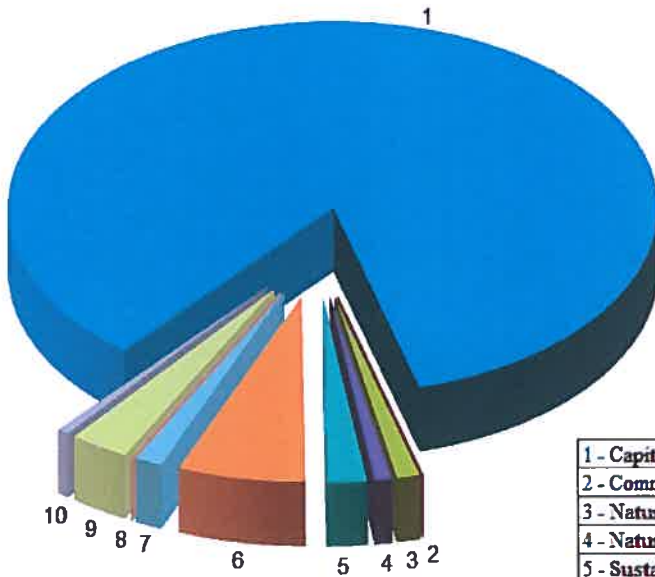
Funding Sources with Totals



Above chart illustrates the funding sources and cost allocations to projects managed by the River Authority (projects from start to finish with multiple fiscal years included)

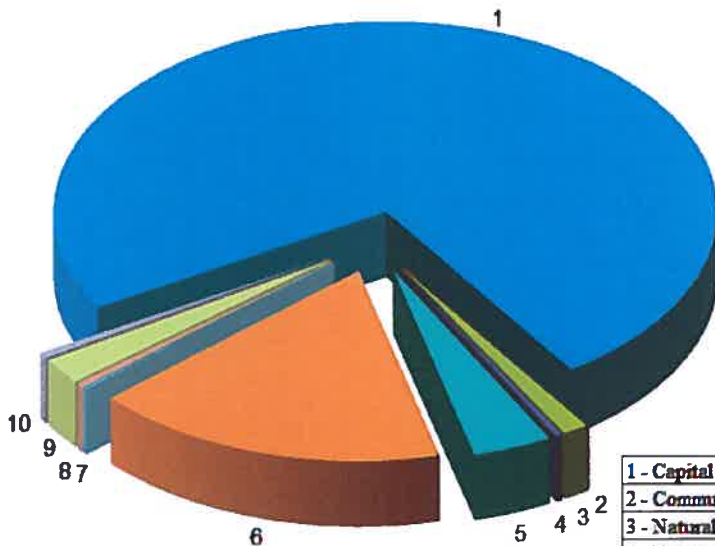
The total funds managed by the River Authority: \$470,480,602

Total Program Funding



Program	Total Amount
1 - Capital Project Implementation Program	398,384,544
2 - Community Outreach & Education Program	79,712
3 - Natural Resource Protection Program	5,535,229
4 - Nature Based Park Program	4,032,738
5 - Sustainable Watersheds Implementation Program	9,537,052
6 - Utilities Program	29,766,177
7 - Water Resource Planning and Supply Program	6,432,111
8 - Watershed Maintenance and Dam Safety Program	285,000
9 - Watershed Modeling and Planning Program	13,734,768
Stand Alone Projects & Efforts	2,693,271
Total	470,480,602

Fiscal Year 2011/12 Program Funding



Program	2011/12 Amount
1 - Capital Project Implementation Program	65,626,564
2 - Community Outreach & Education Program	7,841
3 - Natural Resource Protection Program	1,150,019
4 - Nature Based Park Program	284,525
5 - Sustainable Watersheds Implementation Program	3,449,776
6 - Utilities Program	15,365,980
7 - Water Resource Planning and Supply Program	224,830
8 - Watershed Maintenance and Dam Safety Program	285,000
9 - Watershed Modeling and Planning Program	1,969,179
Stand Alone Projects & Efforts	437,338
Total	88,801,052

**San Antonio River Authority
Program Budgets
Summary**

Program/Project	Program Leader/ Project Manager	2011/12 Budget	Total Budget
-----------------	------------------------------------	-------------------	-----------------

1 - Capital Project Implementation Program

Robert Perez

Bexar County Capital Improvement Projects	Georgia Snodgrass	1,771,015	6,850,924
Calaveras 6 Dam Rehabilitation Project	Jim Doersam	505,511	2,769,231
Calaveras 8 Dam Rehabilitation Project	Jim Doersam	795,774	798,774
Elmendorf Lake Best Management Practices Project	Robert Perez	6,758,527	7,393,395
Medina Dam Improvement Project	Albert Vega	8,740,452	10,000,000
Mission Reach Maintenance Facility Project	Jim Blair	795,000	795,000
San Antonio River Improvement Program	Mark Sorenson		
Eagleland Reach Project	Albert Vega	1,622,297	13,682,579
Museum Reach (Urban Segment) Project	Mark Sorenson	146,690	71,213,524
Museum Reach (Park Segment) Project	Mark Sorenson	2,991,240	13,548,021
Mission Reach Project	Mark Sorenson	41,500,058	271,333,096
PROGRAM TOTAL		65,626,564	398,384,544

2 - Community Outreach & Education Program

Steven Schauer

Witte Center for Rivers Project	Matthew Drifill	7,841	79,712
PROGRAM TOTAL		7,841	79,712

3 - Natural Resource Protection Program

Reeves, Rebecca

Characterization of Sediment Loads in LSAR Project	Melissa Bryant	168,500	612,500
Clean Rivers Program 2009 Grant Project	Charles Lorea	34,900	418,806
Clean Rivers Program 2011 Grant Project	Charles Lorea	174,503	418,806
Digitizing San Antonio Bay Data Project	Michelle Garza	15,000	33,617
Emerging Contaminants Project	Charles Lorea	100,250	286,250
Estuary Response Project	Steve Lusk	112,155	674,714
Instream Flows Planning Project	Rebecca Reeves	22,000	490,962
Instream Flows Study Design & Implementation Project	Rebecca Reeves	1,000	957,488
Instream Flows Verification Project	Rebecca Reeves	205,029	832,806
Laboratory Information Management System Upgrade Project	David Hernandez	10,000	121,825
San Antonio River Authority Stream Monitoring 2011 Project	Karen Sablan	174,820	343,205
San Antonio River Basin Nutrient Loading Survey Project	Rebecca Reeves	22,000	124,067
Upper San Antonio River Watershed Protection Plan Revision #1 Project	Patty Carvajal	77,092	154,183
Water Quality Database and Website Interface Project	Michelle Garza	32,770	66,000
PROGRAM TOTAL		1,150,019	5,535,229

4 - Nature Based Park Program

Dale Bransford

Branch Property Site Development Project	Steven Coussoulis	89,575	721,173
Helton San Antonio River Nature Park Project	Steven Coussoulis	188,450	2,709,827
Loop 1604 River Access Site Development Project	Steven Coussoulis	5,000	160,238
Saspanco Paddling Trail River Acces Project	Steven Coussoulis	1,500	441,500
PROGRAM TOTAL		284,525	4,032,738

5 - Sustainable Watersheds Implementation Program

Karen Bishop

Leon Creek Holistic Watershed Master Plan Project	Rafael Arias	105,000	1,865,998
Medina River Holistic Watershed Masterplan Project	Robert Perez	425,071	870,142
Non-Point Runoff Modeling and BMP Strategies Project	Sheeba Thomas	542,000	578,000
Olmos Basin Alliance Stormwater BMPs Project	Karen Bishop	10,000	90,500
Salado Creek Watershed Master Plan Project	Daniel Aguilar	411,800	870,000
San Antonio River Improvement Program Outfalls Assessment Project	Reha Cimen	35,000	35,000

**San Antonio River Authority
Program Budgets
Summary**

Program/Project	Program Leader/ Project Manager	2011/12 Budget	Total Budget
Stream Restoration Projects East Saltrillo Creek Project	Robert Jenkins	92,196	596,337
Stream Restoration Projects Huebner Creek Project – Leon Valley	Robert Jenkins	339,635	339,635
Stream Restoration Projects Huebner Creek Project – SAWS	Robert Jenkins	363,635	423,635
Stream Restoration Projects Support Project	Robert Jenkins	425,679	1,083,100
Upper San Antonio River Holistic Watershed Masterplan Project	Sheeba Thomas	459,260	1,444,260
Westside Creeks Restoration Project	Rudy Farias	240,500	1,340,445
PROGRAM TOTAL		3,449,776	9,537,052

6 - Utilities Program

John Gomez

ACCD First Responder Wastewater Treatment Plant Project	Jim Doersam	859,450	895,000
City Metering for Saltrillo WWTP and Retail Project	John Gomez	2,000,000	2,000,000
Creekwood Water System Improvements Project	Jim Doersam	10,000	58,361
Graytown Road Development Project	Jim Doersam	414,000	9,584,486
Martinez II Wastewater Treatment Plant Expansion Project	Jim Doersam	4,701,745	8,452,986
Randolph Air Force Base Year 8 (2011) Project	John Gomez	81,000	440,090
Randolph Air Force Base Year 9 (2012) Project	John Gomez	269,000	269,000
Saltrillo Beltpress Replacement Project	Jim Doersam	1,510,000	1,510,000
Saltrillo Collection Wholesale System Inflow and Infiltration	Terry Ploetz	346,538	386,538
Saltrillo Reuse Project	Robert Jenkins	4,083,983	4,376,394
SARA Wastewater Collection System Inflow and Infiltration	Terry Ploetz	861,162	1,011,162
SARA Wastewater Vulnerability & Security Assessment Project	Russell Neal	13,102	133,396
Utilities Supervisory Control Data Acquisition (SCADA) System Project	Jim Doersam	216,000	648,764
PROGRAM TOTAL		15,365,980	29,766,177

7 - Water Resource Planning and Supply Program

Melissa Bryant

Goliad County Water Supply Corporation Project	Melissa Bryant	26,058	5,395,692
Kenedy Desalination Study Project	Melissa Bryant	45,712	730,300
SCTRWP 2016 RWP Fourth Cycle Project	Erin Newberry	153,060	306,119
PROGRAM TOTAL		224,830	6,432,111

8 - Watershed Maintenance and Dam Safety Program

Reha Cimen

Dam Inundation Zone Study Project	Reha Cimen	50,000	50,000
Flood Debris Cleanup 2012 Project	Albert Vega	235,000	235,000
PROGRAM TOTAL		285,000	285,000

9 - Watershed Modeling and Planning Program

Sheeba Thomas

Bexar County Flood Warning and Flood Alert Project	Sheeba Thomas	200,000	1,606,570
Cooperating Technical Partners (CTP) Development Project	Jose Fernandez	111,101	348,531
Dam Instrumentation Project	Wayne Tschirhart	61,574	202,426
Digital Data Model Repository (D2MR) Project	Jose Fernandez	110,000	299,166
Edwards Nueces Feasibility Study Project	Melissa Bryant	1,020,069	10,086,670
Environmental Monitoring System Project	Wayne Tschirhart	92,375	201,947
EDYS Model Development Project	Steve Lusk	122,460	148,460
US Geological Survey Coletto Creek Groundwater Surface Water Project	Melissa Bryant	1,800	159,713
US Geological Survey Paired Watershed Study Project	Melissa Bryant	19,800	236,285
Wilson, Karnes, Goliad Floodplain Master Plan Assistance Project	Rafael Arias	230,000	445,000
PROGRAM TOTAL		1,969,179	13,734,768

**San Antonio River Authority
Program Budgets
Summary**

Program/Project	Program Leader/ Project Manager	2011/12 Budget	Total Budget
Stand Alone Projects & Efforts			
ArcGIS Server Implementation Project	Durmus Cesur	35,000	401,012
Historical Geographical Information System (GIS) Database Project	Emilio Molina	54,994	79,303
Real Estate Geographical Information System (GIS) Support Project	Gilbert Jimenez	75,000	402,612
Wastewater Billing and GIS Assessment Project	Terry Ploetz	272,344	1,810,344
PROGRAM TOTAL		437,338	2,693,271
GRAND TOTAL		\$88,801,052	\$470,480,602

Capital Project Implementation Program

This program will oversee and manage projects and efforts that involve capital improvements and are funded by multiple sources, including counties, cities and federal agencies.

- Bexar County Capital Improvement Projects – Real Estate Acquisitions
- Calaveras 6 Dam Rehabilitation Project
- Calaveras 8 Dam Rehabilitation Project
- Elmendorf Lake Best Management Practices Project
- Medina Dam Improvement Project
- Mission Reach Maintenance Facility Project
- San Antonio River Improvements Program
 - Eagleland Reach Project
 - Mission Reach Project
 - Museum Reach (Park Segment) Project
 - Museum Reach (Urban Segment) Project

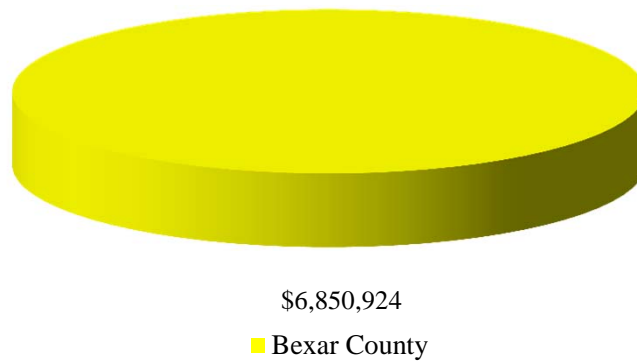
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name:	Bexar County CIP-Real Estate Acquisitions	Project #	BCCIP
Project Start Date:	07/01/08	Total Project Budget:	\$ 6,850,924
Project Finish Date:	06/30/14	Managing Department:	Real Estate

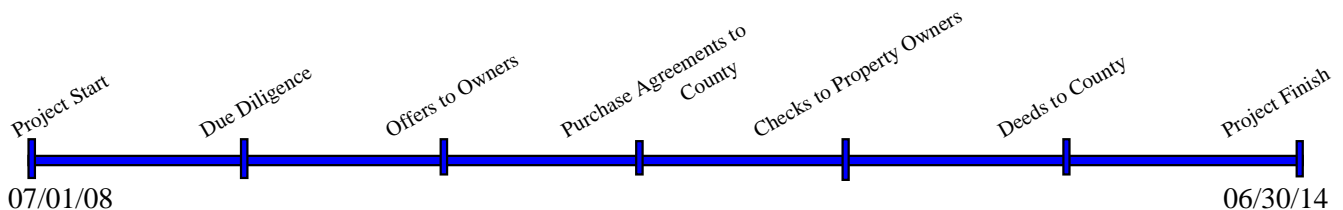
The Bexar County Commissioners Court approved a \$500 million Flood Control Capital Improvements Program (CIP) in 2007. Projects within the program include regional storm water facilities, low water crossings, natural waterway conveyances (channelization), outfall structures and buyouts located throughout Bexar County. San Antonio River Authority Real Estate staff provides real estate acquisition services for the program including due diligence and negotiations with property owners under the threat of eminent domain. The 4th Amendment to the interlocal agreement with the County identifies a total of 49 projects, represented cumulatively below.

Expenditures	<u>As of</u> <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding</u> <u>from</u> <u>2013/14</u>	<u>Total</u>
Personnel	\$ 351,407	\$ 441,807	\$ 349,092	\$ 183,044	\$ 1,325,350
Commodities	1,238,109	417,207	18,724	1,378,540	3,052,580
Contracts	739,980	912,001	668,572	152,441	2,472,994
Total	<u>\$ 2,329,496</u>	<u>\$ 1,771,015</u>	<u>\$ 1,036,388</u>	<u>\$ 1,714,025</u>	<u>\$ 6,850,924</u>

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

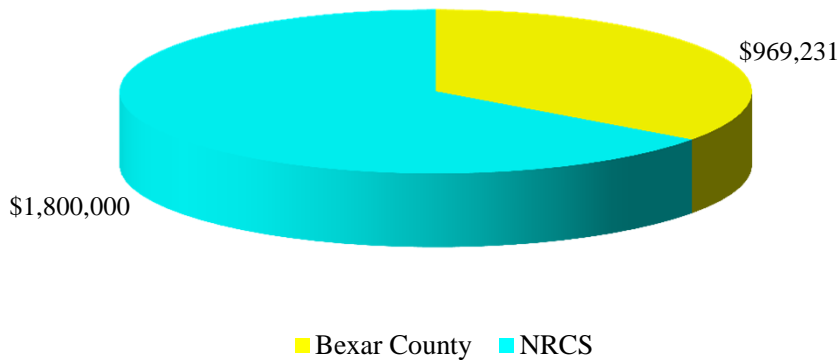
Project Name: Calaveras 6 Dam Rehabilitation **Project #** 00000088

Project Start Date: 06/19/09 Total Project Budget: \$ 2,769,231
 Project Finish Date: 06/30/12 Managing Department: Watershed Operations

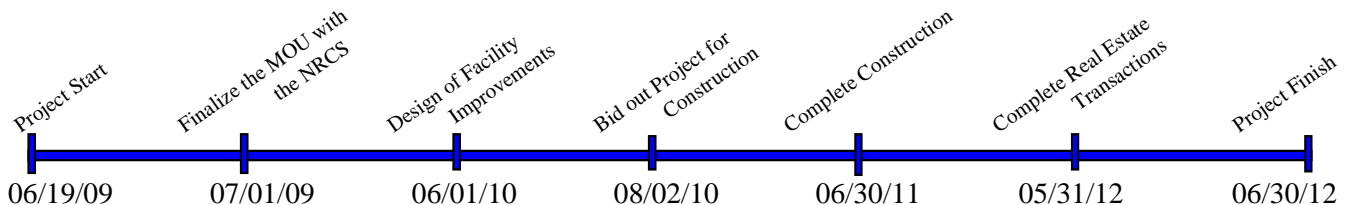
This project will fund rehabilitation of an existing River Authority dam structure to meet current Federal and State standards. The Calaveras 6 Dam was constructed in 1956 as a Class 'C' dam. It is currently classified as a "High Hazard" dam by the State of Texas and the Natural Resources Conservation Service (NRCS) and does not meet the current safety and performance criteria of either regulatory agency. The proposed improvements to this dam will bring it up to current compliance standards and will extend the useful life by at least 50 years. Funding for these improvements will be provided by the NRCS (65%) and Bexar County (35%), and the dam will continue to be operated by the River Authority. Design began in fiscal year 2009/10, and construction is scheduled for completion in fiscal year 2010/11.

Expenditures	<u>As of 2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	<u>Total</u>
Personnel	\$ 125,000	\$ 15,000	\$ -	\$ -	\$ 140,000
Commodities	200,500	185,000	-	-	385,500
Contracts	1,938,220	305,511	-	-	2,243,731
Total	<u>\$ 2,263,720</u>	<u>\$ 505,511</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 2,769,231</u>

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

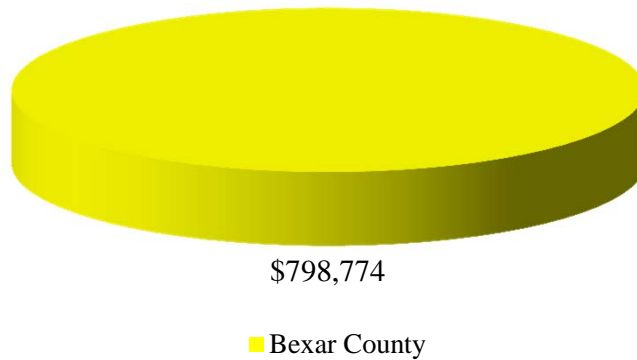
Project Name: Calaveras 8 Dam Rehabilitation **Project #** 00000248

Project Start Date: 03/15/10 Total Project Budget: \$ 798,774
 Project Finish Date: 06/30/12 Managing Department: Watershed Operations

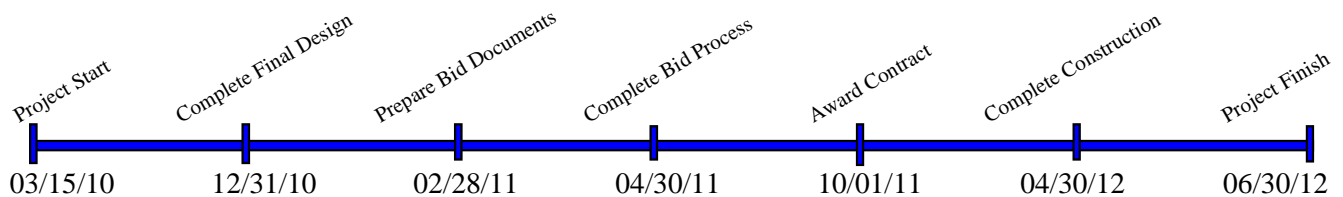
The purpose of this project is to improve the Calaveras 8 Dam to current Texas Commission on Environmental Quality standards. Improvements primarily include earthwork to increase the height of the dam and to improve the auxiliary spillways. The existing principal spillway pipe will be slip lined (cured in place pipe, or "CIPP") to repair cracks that have developed through the years. The design is being administered through Bexar County, and the River Authority will provide construction administration and project management services through construction.

Expenditures	As of			Succeeding	Total
	2010/11	2011/12	2012/13	from 2013/14	
Personnel	\$ 3,000	\$ 27,000	\$ -	\$ -	\$ 30,000
Commodities	-	18,000	-	-	18,000
Contracts	-	750,774	-	-	750,774
Total	\$ 3,000	\$ 795,774	\$ -	\$ -	\$ 798,774

Project Revenues by Funding Source:



Project Milestones



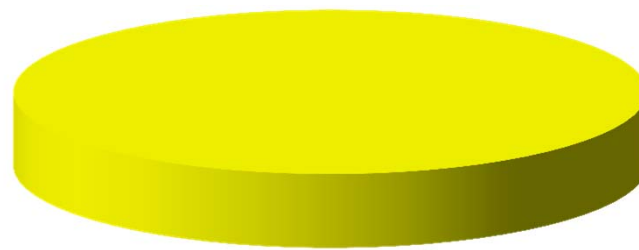
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Elmendorf Lake BMPs **Project #** 00000028
Project Start Date: 08/03/09 **Total Project Budget:** \$ 7,393,395
Project Finish Date: 11/30/12 **Managing Department:** Engineering

Bexar County, in coordination with its Bexar Regional Watershed Management (BRWM) partners, the San Antonio River Authority, and the City of San Antonio, wishes to make improvements to Elmendorf Lake and its contributing drainage area. The Best Management Practice applied to this project will be dredging. The Elmendorf Lake Dredging project consists of maintenance dredging of Elmendorf Lake to remove accumulated sediments, including removal of large debris encountered during the dredging conditions. The project includes de-watering of the dredged material, testing of the dried dredged material to determine waste class, and transportation to and disposal of the dredged material in an authorized landfill site. Lake Elmendorf is located just north of Our Lady of the Lake University (OLLU) in the City of San Antonio, Texas.

Expenditures	As of			Succeeding	
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>from</u> <u>2013/14</u>	<u>Total</u>
Personnel	\$ 29,088	\$ 121,500	\$ 11,054	\$ -	\$ 161,642
Commodities	748	2,000	-	-	2,748
Contracts	470,164	6,635,027	123,814	-	7,229,005
Total	<u>\$ 500,000</u>	<u>\$ 6,758,527</u>	<u>\$ 134,868</u>	<u>\$ -</u>	<u>\$ 7,393,395</u>

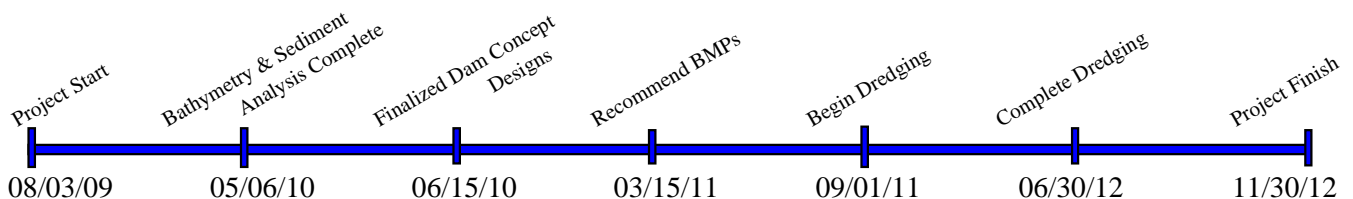
Project Revenues by Funding Source:



\$7,393,395

■ Bexar County

Project Milestones



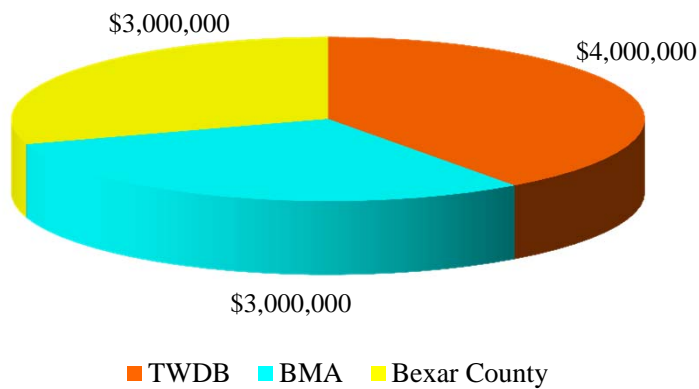
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Medina Dam Improvement **Project #** 00000149
Project Start Date: 01/05/10 **Total Project Budget:** \$ 10,000,000
Project Finish Date: 12/31/11 **Managing Department:** Engineering

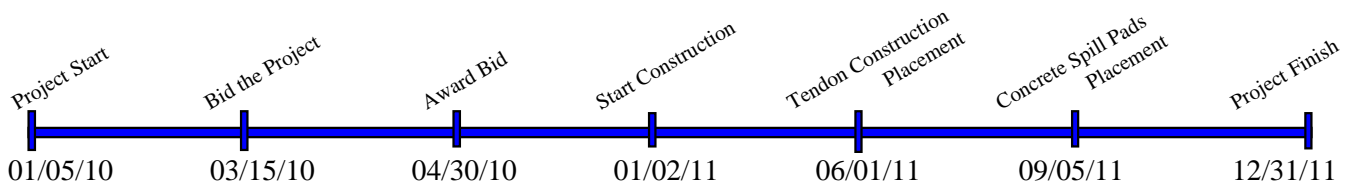
This project provides management and construction administration services to Bexar-Medina-Atascosa Counties Water Control & Improvement District No.1 (BMA), the Texas Water Development Board (TWDB), and Bexar County for the Medina Dam Improvements. The improvements will include the addition of 30 anchors to the dam's existing abutments. The improvements also include the addition of a concrete apron downstream of the emergency spillway.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ 90,507	\$ 213,560	\$ -	\$ -	\$ 304,067
Commodities	7,939	3,000	-	-	10,939
Contracts	1,161,102	8,523,892	-	-	9,684,994
Total	\$ 1,259,548	\$ 8,740,452	\$ -	\$ -	\$ 10,000,000

Project Revenues by Funding Source:



Project Milestones



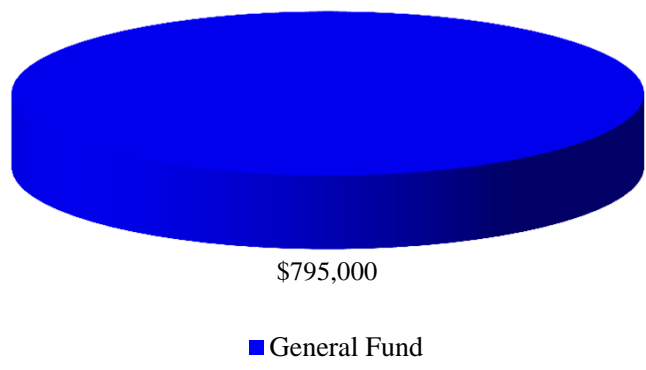
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Mission Reach Maintenance Facility **Project #** 00000299
Project Start Date: 07/01/11 **Total Project Budget:** \$ 795,000
Project Finish Date: 06/30/12 **Managing Department:** Watershed Operations

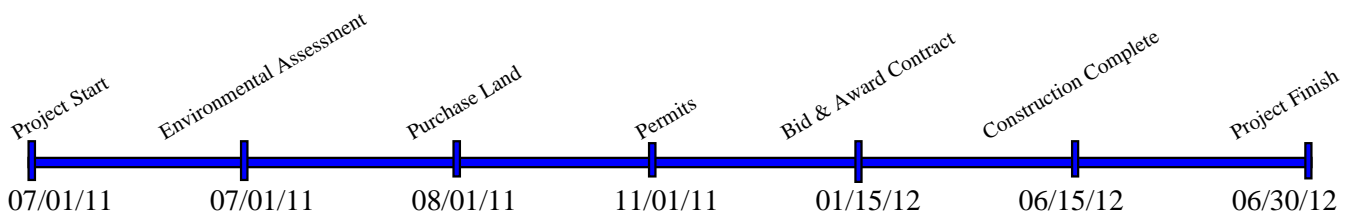
This project will include property purchase and the construction of a maintenance facility for the central portion of the Mission Reach Segment operations and maintenance activities. Site selection is in progress for approximately 2.5 acres between Roosevelt Road and Pyron Road. The building planned for construction will include office space, a shop for the maintenance crews and equipment housing. This plan also includes associated improvements, i.e. security fencing, site work and access to the trail system.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ -	\$ 15,000	\$ -	\$ -	\$ 15,000
Commodities	-	-	-	-	-
Contracts	-	780,000	-	-	780,000
Total	<u>\$ -</u>	<u>\$ 795,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 795,000</u>

Project Revenues by Funding Source:



Project Milestones



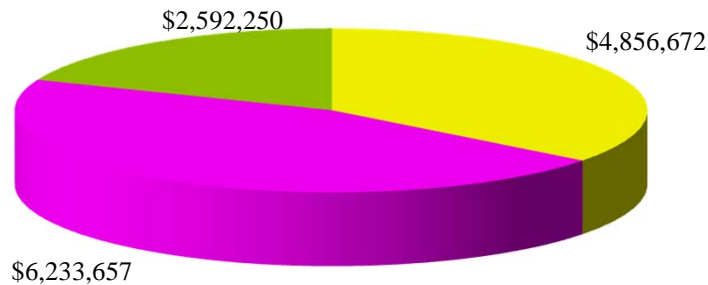
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Eagleland Reach **Project #** 00000137
Project Start Date: 09/30/98 **Total Project Budget:** \$ 13,682,579
Project Finish Date: 12/31/12 **Managing Department:** Engineering

This project consists of design and construction administration services for modification and ecosystem restoration of the San Antonio River Channel from South Alamo Street to the San Antonio River Tunnel Outlet at Lone Star Boulevard. Fluvial geomorphology and biology elements have been constructed to ensure erosion control for the banks and pilot channel during a flood event, to protect water quality during normal flow, and to create and/or improve habitat for fish and wildlife. This project contains 75% federal funding from the US Army Corps of Engineers Section 1135 program. The project includes 4,700 linear feet of river channel. Phase I construction which includes pilot channel reshaping and armoring was completed March 2005. Phase II plans include federal funding and provide for the re-vegetation of the river with trees, shrubs, forbes, and aquatic vegetation. Local funds (100%) are being used to protect 300 linear feet of the east bank south of Alamo Street as a joint bid project with the City of San Antonio/Texas Department of Transportation. A hike and bike project began construction in late 2009 and completed in May 2011. Bexar County Visitor Tax dollars are being used to add amenities to the reach.

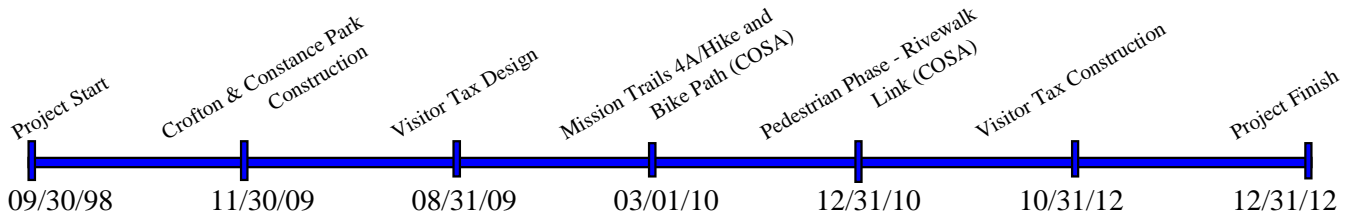
Expenditures	As of		Succeeding		Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	
Personnel	\$ 591,001	\$ 2,014	\$ 2,000	\$ -	\$ 595,015
Commodities	27,811	-	-	-	27,811
Contracts	10,666,828	1,620,283	772,642	-	13,059,753
Total	\$ 11,285,640	\$ 1,622,297	\$ 774,642	\$ -	\$ 13,682,579

Project Revenues by Funding Source:



■ Bexar County ■ City of San Antonio ■ Corps of Engineers

Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

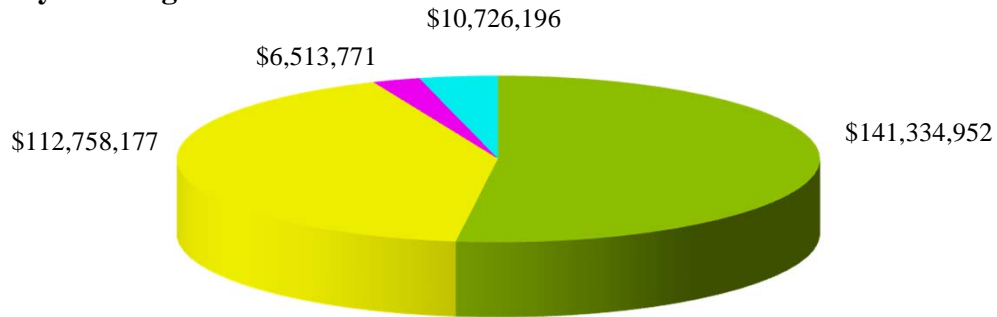
Project Name: Mission Reach **Project #** 00000136

Project Start Date: 01/01/98 Total Project Budget: \$ 271,333,096
 Project Finish Date: 08/31/13 Managing Department: Engineering

A joint effort between the US Army Corps of Engineers (USACE), Bexar County, City of San Antonio, and San Antonio River Authority is ongoing to provide ecosystem restoration while maintaining or improving flood reduction benefits to the San Antonio River from Lone Star Boulevard to Mission Espada. The San Antonio River Oversight Committee provides public direction and input for the project. Preliminary design authorization for the Historic Mission Reach was given by the County on November 6, 2001, and substantially completed in October 2003. The locally prepared design with modifications was selected by the USACE as the preferred plan which has received approval from the Assistant Secretary of the Army for Civil Works. Final design of the Mission Reach began in October 2004, and a 30% final design effort was completed in July 2006. The Mission Reach was divided into four phases: Phase 1 reach completed final design in June 2007. Phase 2 and Phase 3 began final design in July 2007. Through the co-commitment of local and federal funding, Phase 1 was completed in December of 2009. Phase 2 was completed in May of 2011 with a formal Grand Opening of Phase 1 and 2 in June 2011. Phase 3 is scheduled to complete by 8/31/2013.

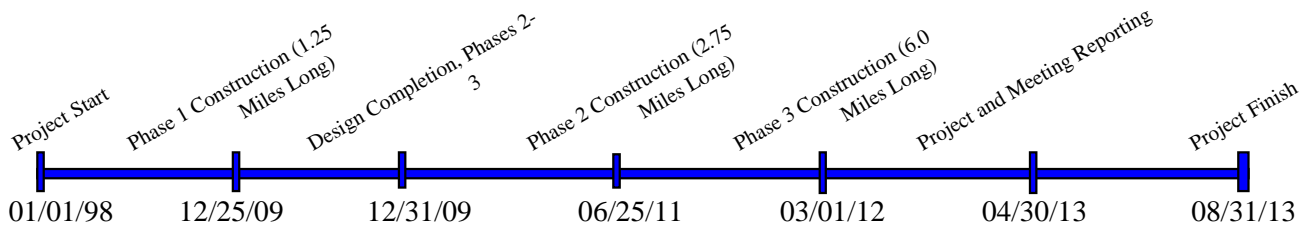
Expenditures	As of			Succeeding	
	2010/11	2011/12	2012/13	2013/14	Total
Personnel	\$ 5,297,311	\$ 1,000,000	\$ 1,000,000	\$ 100,000	\$ 7,397,311
Commodities	4,601,343	5,000,057	-	-	9,601,400
Contracts	100,992,641	35,500,001	31,699,200	86,142,543	254,334,385
Total	\$ 110,891,295	\$ 41,500,058	\$ 32,699,200	\$ 86,242,543	\$ 271,333,096

Project Revenues by Funding Source:



■ Corps of Engineers ■ Bexar County ■ City of San Antonio ■ All Others

Project Milestones



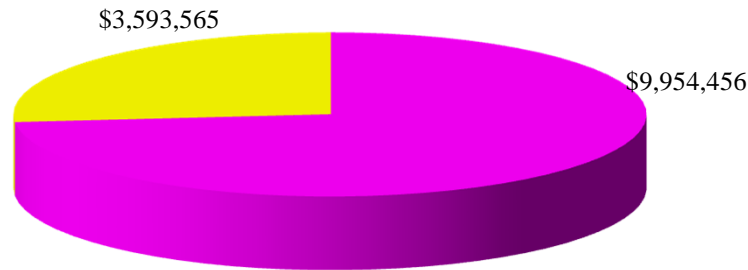
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Museum Reach (Park Segment) **Project #** 00000139
Project Start Date: 09/18/08 **Total Project Budget:** \$ 13,548,021
Project Finish Date: 06/28/13 **Managing Department:** Engineering

This project will extend the Museum Reach Urban Segment trail system from where it ended at Josephine Street into and through the Tunnel Inlet parking lot, under U.S. 281 and east to Avenue B. From that point, the existing trails will be altered and enhanced so that hikers and cyclists can navigate their way to Hildebrand Avenue. This project will also help remove invasive vegetation along the Catalpa outfall and replant it with native species, create a wetland near the Witte Museum, and develop pedestrian crossings at Mulberry and Tuleta avenues.

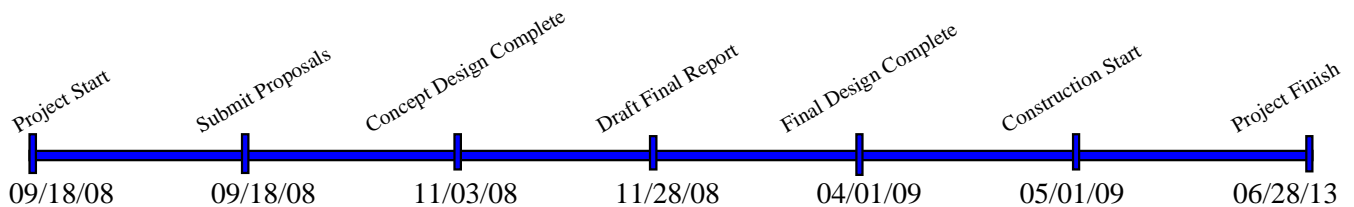
Expenditures	As of			Succeeding	<u>Total</u>
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	from <u>2013/14</u>	
Personnel	\$ 332,882	\$ 165,000	\$ 178,901	\$ -	\$ 676,783
Commodities	13,434	6,000	5,000	-	24,434
Contracts	8,909,864	2,820,240	1,116,700	-	12,846,804
Total	<u>\$ 9,256,180</u>	<u>\$ 2,991,240</u>	<u>\$ 1,300,601</u>	<u>\$ -</u>	<u>\$ 13,548,021</u>

Project Revenues by Funding Source:



■ City of San Antonio ■ Bexar County

Project Milestones



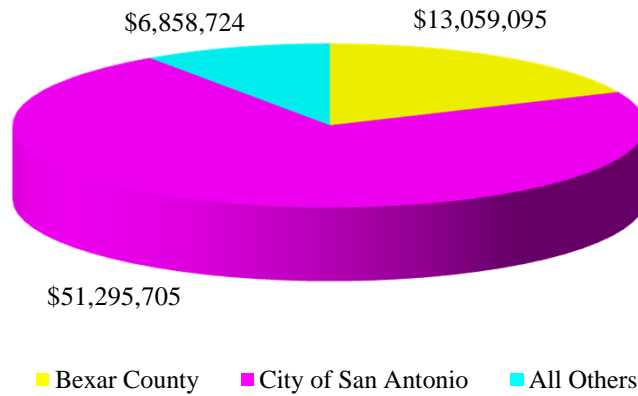
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Museum Reach (Urban Segment) **Project #** 00000138
Project Start Date: 10/01/98 **Total Project Budget:** \$ 71,213,524
Project Finish Date: 01/21/13 **Managing Department:** Engineering

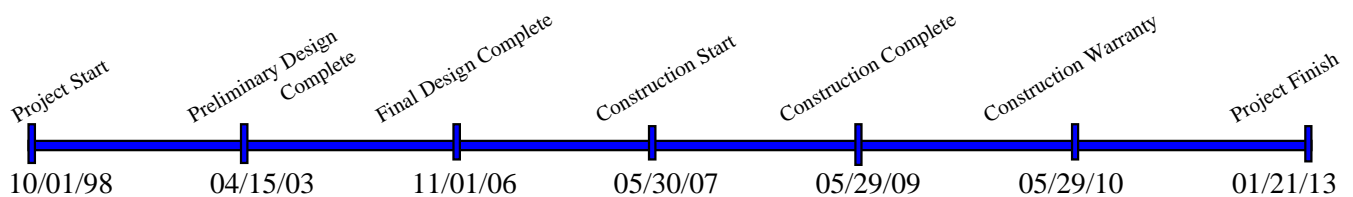
This project extended the current River Walk from Lexington Avenue about 7000 feet to Josephine Street. Sidewalks with street-to-river access structures were provided on both banks of the project. The project has a Lock and Dam system that lifts the barges almost 9 feet allowing them to traverse the additional 6500 feet needed to get to Grayson Avenue. The barge traffic will stop at this location but the pedestrian traffic can continue another 500 feet to Josephine Street. At this point, the pedestrian traffic will have the opportunity to access Josephine Street and use it along with other streets to continue on to Brackenridge Park. In Fiscal Year 2012 the project's last phase will include the completion of the Federal Emergency Management Agency (FEMA) Letter of Map Revision (LOMR).

Expenditures	As of		Succeeding		Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	
Personnel	\$ 1,203,228	\$ -	\$ -	\$ -	\$ 1,203,228
Commodities	503,606	-	-	-	503,606
Contracts	69,360,000	146,690	-	-	69,506,690
Total	\$ 71,066,834	\$ 146,690	\$ -	\$ -	\$ 71,213,524

Project Revenues by Funding Source:



Project Milestones



Community Outreach & Education Program

This program will coordinate and manage community efforts within the following areas: water and wastewater utilities; floodplain management, parks, water quality, GIS, and stream restoration. The program will oversee and manage projects and efforts that are intended to educate and inform communities about water, the river, and its tributaries within the San Antonio River Authority's jurisdiction.

Witte Center for Rivers
Efforts

**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Witte Center for Rivers **Project #** 00000265
Project Start Date: 07/01/10 **Total Project Budget:** \$ 79,712
Project Finish Date: 06/30/15 **Managing Department:** IGCR

The Witte Museum is developing a new building to house the Center for Rivers and Aquifers. The River Authority has an opportunity to assist in the creation of the exhibits in the new building and retain some branding visibility when the building is complete and open. The current timeline for this building to be developed is in the third phase of the Witte's capital campaign, and details regarding the River Authority's involvement have been tabled until a later date. In the meantime the River Authority's ongoing programming and exhibit support of the Witte is being billed to the Center for Rivers and Aquifers to track the overall investment in the Witte Museum for branding recognition.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 8,300	\$ 7,841	\$ 7,840	\$ 55,681	\$ 79,662
Commodities	50	-	-	-	50
Contracts	-	-	-	-	-
Total	<u>\$ 8,350</u>	<u>\$ 7,841</u>	<u>\$ 7,840</u>	<u>\$ 55,681</u>	<u>\$ 79,712</u>

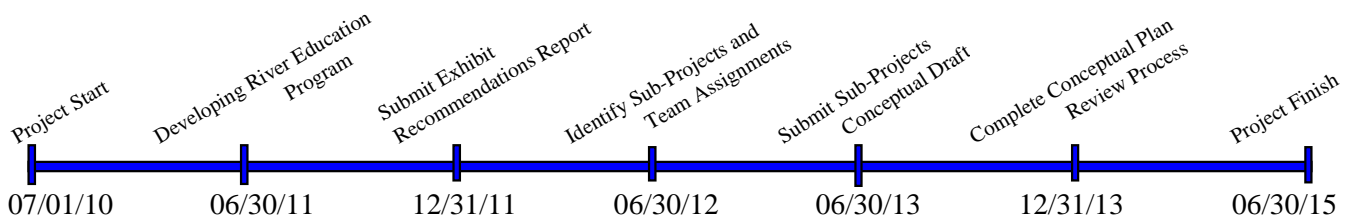
Project Revenues by Funding Source:



\$79,712

■ General Fund

Project Milestones



Community Outreach & Education Program Efforts

- **Community Assistance - Sustainable Watershed Awareness**

Through appropriate partnerships and alliances with other agencies, the River Authority will encourage, facilitate and support various landowner and community leader workshops and training. This effort will support the River Authority Hedgehog “Serving as technical resource leaders and environmental stewards that facilitate the execution of integrated, collaborative and innovative solutions.”

- **Community Assistance - Bexar County**

The River Authority is dedicated to assisting communities within the district through promotion of partnerships and alliances with counties, cities and other agencies, and through optimization of available funds. This effort will support all River Authority Bexar County programs and serves to identify needs. Activities include regular visits with the communities through participation in related organizations, attendance at community meetings, and referrals from River Authority partners and employees. The goal of this effort is to support the River Authority’s service goals and objectives by sharing River Authority staff expertise and resources within the district.

- **Community Assistance - Goliad County**

The River Authority is dedicated to assisting communities within the district through promotion of partnerships and alliances with counties, cities and other agencies, and through optimization of available funds. This effort will support all River Authority Goliad County programs and serves to identify needs. Activities include regular visits with the communities through participation in related organizations, attendance at community meetings, and referrals from River Authority partners and employees. The goal of this effort is to support the River Authority’s service goals and objectives by sharing River Authority staff expertise and resources within the district.

- **Community Assistance - Karnes County**

The River Authority is dedicated to assisting communities within the district through promotion of partnerships and alliances with counties, cities and other agencies, and through optimization of available funds. This effort will support all River Authority Karnes County programs and serves to identify needs. Activities include regular visits with the communities through participation in related organizations, attendance at community meetings, and referrals from River Authority partners and employees. The goal of this effort is to support the River Authority’s service goals and objectives by sharing River Authority staff expertise and resources within the district.

- **Community Assistance - Wilson County**

The River Authority is dedicated to assisting communities within the district through promotion of partnerships and alliances with counties, cities and other agencies, and through optimization of available funds. This effort will support all River Authority Wilson County programs and serves to identify needs. Activities include regular visits with the communities through participation in related organizations, attendance at community meetings, and referrals from River Authority partners and employees. The goal of this effort is to support the River Authority’s service goals and objectives by sharing River Authority staff expertise and resources within the district.

- **Educators Conference**

The 8th Annual Water: A Living Lesson Educator's Conference is sponsored by the Edwards Aquifer Authority, University of Texas at San Antonio, Education Service Center Region 20, San Antonio River Authority and San Antonio Water System, and continues the tradition of providing educators diverse opportunities to learn innovative, interactive, and tested methods of teaching water subjects. It explores practical, up-to-date examples of successful educational programs and materials through 40 interactive sessions of workshops, as well as field trips, to provide educators with physical resources and strategies for developing comprehensive water lessons to take back into the classroom. The River Authority's participation includes conference sponsorship and planning, preparation of the conference booklet and promotional materials, and presentation of workshops and field trips.

- **Environmental Awareness Initiative**

As an active leader in environmental stewardship and water quality issues, the River Authority has developed an environmental awareness initiative designed to inform the San Antonio River Basin community on ways citizens can protect and preserve the environment of the San Antonio River and its tributaries. Initially, this program includes four different messages focused on reducing pollution in and along the San Antonio River. The messages address issues such as illegal dumping, general recycling and reducing the use of plastic bags. The River Authority's commitment to this environmental education and outreach initiative is long-term, and, as such, staff anticipates that this initiative will evolve over time to include other outreach programs. Through public and private sector cooperation and with a potential increase of funding support for the environmental awareness initiative, the River Authority could maximize its efforts to develop a long-term outreach program that would help influence appreciation for the San Antonio River Basin. (This effort was initiated in fiscal year 2009/10 as a project and later converted to an effort.)

- **Outdoor Education Programs**

This effort includes all of the River Authority's outdoor education programming. These programs include but are not limited to nature hikes at Jackson Nature Park four times in the fall and winter; bat talks that are given four times in the summer; the monthly Mission Reach tours coordinated with the Alamo Area Master Naturalists; future programs under development with the Girl Scouts of Southwest Texas; Museum Reach tours upon request; Mission Reach tours upon request; facilitating Project WILD workshops for educators; and other tailored outdoor programming upon request.

- **River Reach Quarterly Newsletter**

The River Authority's quarterly newsletter provides information to the public about the River Authority's activities throughout the basin.

- **San Antonio River Basin Field Guide**

The Field Guide for the San Antonio River Basin Project was developed to assist in public education and outreach efforts and will create the first guide of its kind for identifying plants and animals common to our basin, as well as describing general ecosystem restoration information. The Basin Project includes collection and assembly of data for the most common native and non-native plant and animal species within the basin and was made accessible to the public on the internet during fiscal year 2010/11. The general data to be collected includes basic species descriptions and photographs or other images of species. Species distribution maps may also be included in the project. The data was assembled and put on the internet in a manner that is simple for the public to access during fiscal year 2010/11. A hard copy deliverable will be prepared during fiscal year 2011/12.

- **San Antonio River Industrial Development Authority - SARIDA**
 Pursuant to the Development Corporation Act of 1979, the San Antonio River Authority created the San Antonio River Industrial Development Corporation (SARIDA) to finance, through the issuance of tax-exempt bonds, the development of commercial, industrial and manufacturing enterprises to promote and encourage employment. SARIDA is authorized to operate in Bexar, Wilson, Karnes, and Goliad counties.
- **SARIP Event Opportunities**
 The effort may use a consultant to help River Authority staff develop and promote a series of annual events along the Museum Reach Urban Segment and Mission Reach, which will have the potential to generate revenue that can be used to offset the River Authority's expenses to host the events and possibly to offset O&M costs. The goal will be to provide venues and opportunities for locals and visitors alike to enjoy these new segments of the San Antonio River, resulting in increased public appreciation for the San Antonio River, public understanding of the river's value to our community and the watershed, public visibility to the River Authority through event publicity, and opportunities for River Authority staff to volunteer and become engaged in community events and public/private partnerships as other governmental agencies and private sector business will be involved in the success of the events.
- **Sponsorship and Participation in Community**
 The River Authority participates in the communities throughout the basin by providing financial and/or staff assistance for community events and activities that support the River Authority's mission.
- **Tax Increment Financing - TIF**
 Chapter 311 of the Texas Tax Code provides for the use of tax increment financing (TIF) as a tool to promote and attract commercial and residential development or redevelopment in certain areas within the San Antonio River Authority jurisdiction. The River Authority may be requested to participate in a TIF project within a Tax Increment Reinvestment Zone (TIRZ) created by a local municipality or county.
- **Virtual Watershed**
 This effort will provide information on watersheds over the internet. The information will assist any environmental effort in the basin. This effort will feature a fact sheet for citizens to see the characteristics of their watershed, such as potential flooding areas, streams, native plants, and any photos of the watershed. The tool can be used by River Authority staff in any River Authority attended event to be responsive to our constituents. The initial deliverable will be a GIS-based fact sheet for the address/location. If this effort is successful, creation of a video/virtual tour of the watershed is the next project initiative. The tour will show footage of various areas of creeks with the ability for the user to navigate along the streams. Along the way, factoids of various water features will be displayed (e.g., treatment plant walk-through and explanations, dam tours, etc.). A possible addition to the site will be a blog allowing citizens to give feedback about their watershed, thus allowing the River Authority to be more responsive to its constituents.
- **Witte Touch Tank**
 The River Authority provides support for a touch tank at the Witte Museum. The touch tank is a replicated stream segment that visitors can touch, providing them an opportunity to learn more about watersheds, healthy ecosystems and the animals and insects that live in the San Antonio River and its tributaries.

Natural Resource Protection Program

This program includes projects that are designed to identify concerns and communicate information about water quality and aquatic and riparian habitats and communities so they may be protected and/or restored. The program covers projects that pertain to:

- Determining Instream flows and fresh water inflows needs.
- Identifying pollutant sources, monitoring, and tracking water quality trends.
- Identifying degradation of riverine habitat and biological communities.
- Characterize current sediment conditions in the watershed.

Characterization of Sediment Loads in Lower San Antonio River
Clean Rivers Program 2009 Grant Project
Clean Rivers Program 2011 Grant Project
Digitizing San Antonio Bay Data Project
Emerging Contaminants Project
Estuary Response Project
Instream Flows Planning Project
Instream Flows Study Design & Implementation Project
Instream Flows Verification Project
Laboratory Information Management System Upgrade Project
San Antonio River Basin Nutrient Loading Survey Project
San Antonio River Authority Stream Monitoring Project
Upper San Antonio River Watershed Protection Plan Revision #1 Project
Water Quality Database and Website Interface Project

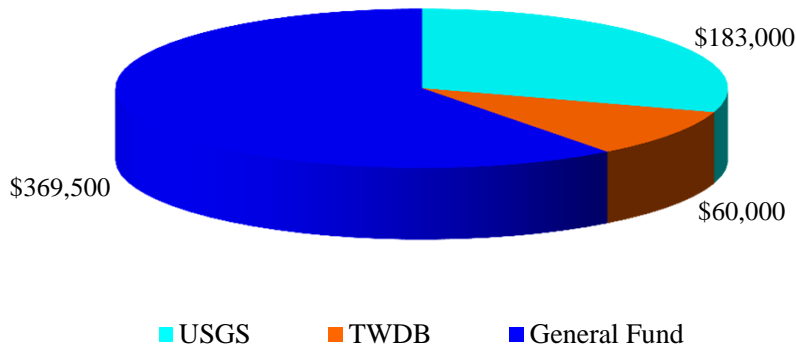
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Characterization of Sediment Loads **Project #** 00000262
Project Start Date: 10/01/10 **Total Project Budget:** \$ 612,500
Project Finish Date: 09/30/13 **Managing Department:** WRCD

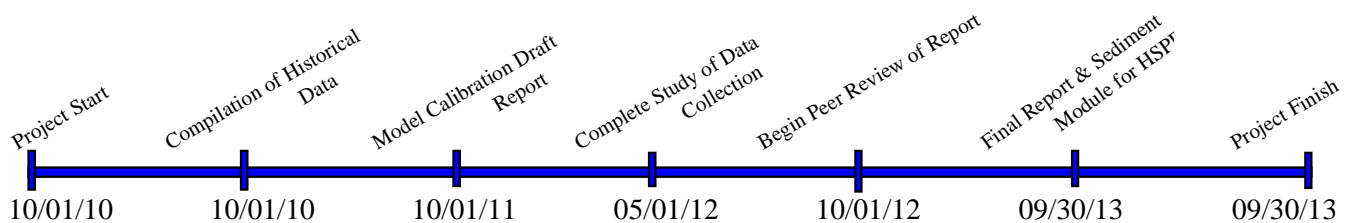
The purpose of this project is to collect suspended sediment samples and bed-load samples at five locations in the Lower San Antonio River (LSAR) watershed. Samples need to be collected for a range of flow conditions. The results will be published in a U.S. Geological Survey (USGS) report. Analysis will include estimates of loadings at each location. The Hydrologic Simulation Program Fortran model of the LSAR would be updated to include sediment simulation. In Fiscal Year 2012, USGS will continue to collect suspended sediment samples and bed sediment samples. The number of samples collected may be limited by weather conditions since it is necessary to collect samples at different ranges of flow conditions.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 2,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 9,500
Commodities	-	-	-	-	-
Contracts	175,000	166,000	190,000	72,000	603,000
Total	\$ 177,000	\$ 168,500	\$ 192,500	\$ 74,500	\$ 612,500

Project Revenues by Funding Source:



Project Milestones



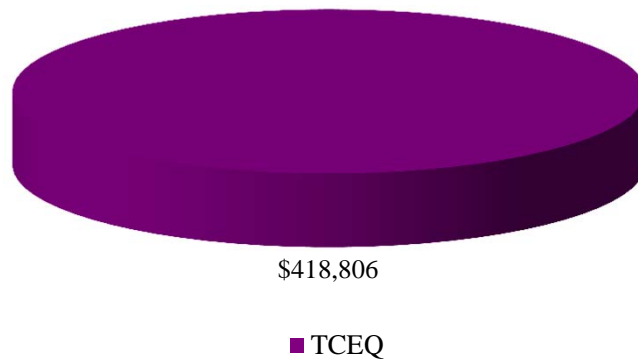
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Clean Rivers Program 2009 Grant **Project #** 00000097
Project Start Date: 08/21/09 **Total Project Budget:** \$ 418,806
Project Finish Date: 12/31/11 **Managing Department:** Environmental Sciences

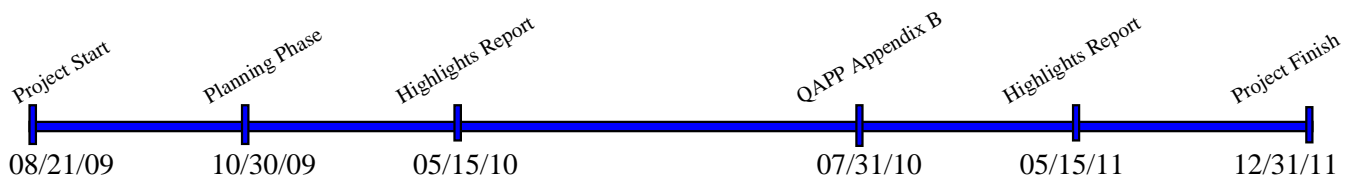
The San Antonio River Authority manages two projects that collect routine surface water quality data in the San Antonio River Basin. One is the San Antonio River Authority Stream Monitoring Project, which is funded by the River Authority's general fund. The second is the Texas Clean Rivers Program (CRP) which is funded annually by the Texas Commission on Environmental Quality (TCEQ). The CRP, which has been on-going since 1992, provides funding to analyze and manage data gathered from surface water samples collected throughout the basin. In addition, the CRP allows for funding of both field equipment and laboratory instruments. The CRP project will produce quality assured water quality data for the assessment of current water quality conditions and long term trends. This project includes two annual contract periods beginning 9/1/09 through 8/31/11 with TCEQ.

Expenditures	<u>As of</u> <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding</u> <u>from</u> <u>2013/14</u>	<u>Total</u>
Personnel	\$ 323,653	\$ 34,900	\$ -	\$ -	\$ 358,553
Commodities	60,253	-	-	-	60,253
Contracts	-	-	-	-	-
Total	<u>\$ 383,906</u>	<u>\$ 34,900</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 418,806</u>

Project Revenues by Funding Source:



Project Milestones



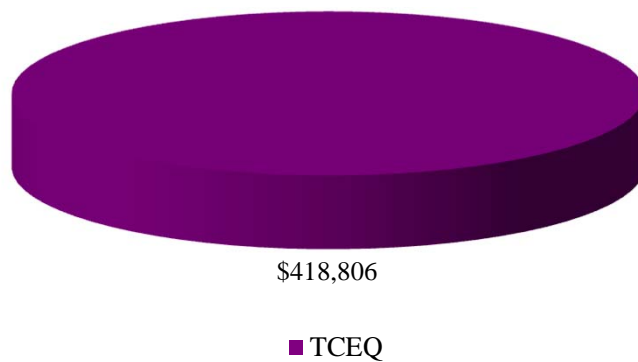
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Clean Rivers Program 2011 Grant **Project #** 00000342
Project Start Date: 09/01/11 **Total Project Budget:** \$ 418,806
Project Finish Date: 12/31/13 **Managing Department:** Environmental Sciences

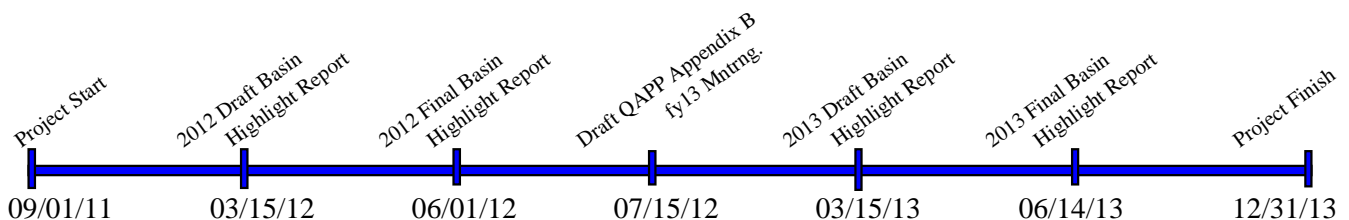
There are two projects collecting routine surface water quality data in the San Antonio River Basin. One is the San Antonio River Authority Stream Monitoring Project which is funded by the River Authority's general fund. The second is the Texas Clean Rivers Program (CRP) which is funded annually by the Texas Commission on Environmental Quality (TCEQ). The CRP, which has been on-going since 1992, provides funding to analyze and manage data gathered from surface water samples collected throughout the basin. In addition, the CRP allows for funding of both field equipment and laboratory instruments. The CRP project will produce quality assured water quality data for the assessment of current water quality conditions and long term trends. This project includes two annual contract periods beginning 9/1/11 through 8/31/13 with TCEQ.

Expenditures	<u>As of</u> <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding</u> <u>from</u> <u>2013/14</u>	<u>Total</u>
Personnel	\$ -	\$ 137,650	\$ 178,350	\$ 34,900	\$ 350,900
Commodities	-	36,853	31,053	-	67,906
Contracts	-	-	-	-	-
Total	\$ -	\$ 174,503	\$ 209,403	\$ 34,900	\$ 418,806

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

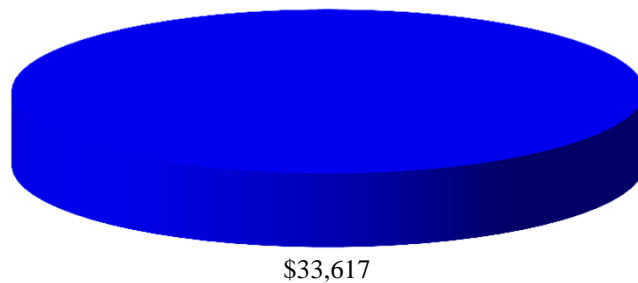
Project Name: Digitizing SA Bay Data **Project #** 00000082

Project Start Date: 07/01/08 Total Project Budget: \$ 33,617
 Project Finish Date: 06/30/12 Managing Department: Environmental Sciences

The River Authority has retained the services of Dr. George Ward of the University of Texas to analyze historical data and information to evaluate the water quality and ecosystem responses to freshwater inflow to San Antonio Bay. The data has been collected by the Texas Parks and Wildlife Department, Texas Water Development Board, Texas Commission on Environmental Quality, their predecessor agencies and others. The data is substantial and provides a record dating from the 1930's to the 1980's. However, the data is on paper only and not available electronically or in any format that can be readily analyzed. The Digitizing San Antonio Bay Data project proposes to collect the available data forms and enter the information into an electronic database so the information can be queried, sorted, selected, evaluated and analyzed by Dr. Ward. Additionally, the project proposes to scan the data forms into computer files to establish a permanent electronic record of the original paper documents.

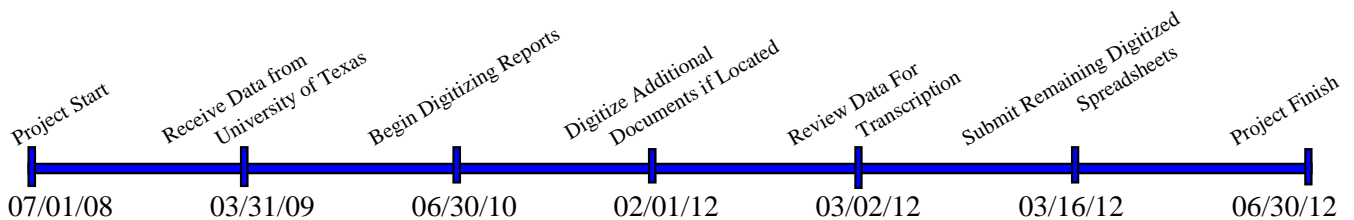
Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ 18,617	\$ 15,000	\$ -	\$ -	\$ 33,617
Commodities	-	-	-	-	-
Contracts	-	-	-	-	-
Total	\$ 18,617	\$ 15,000	\$ -	\$ -	\$ 33,617

Project Revenues by Funding Source:



■ General Fund

Project Milestones



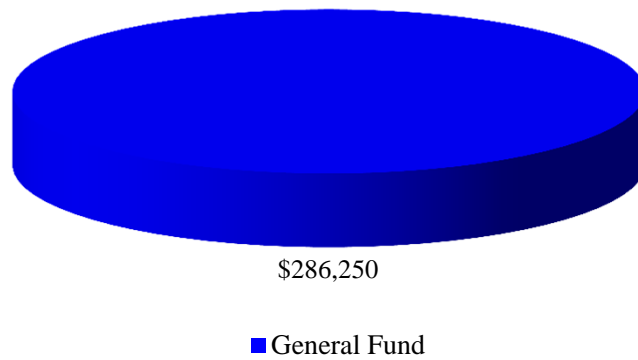
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: **Emerging Contaminants** **Project #** **00000240**
Project Start Date: 10/01/10 **Total Project Budget:** \$ 286,250
Project Finish Date: 01/01/14 **Managing Department:** Environmental Sciences

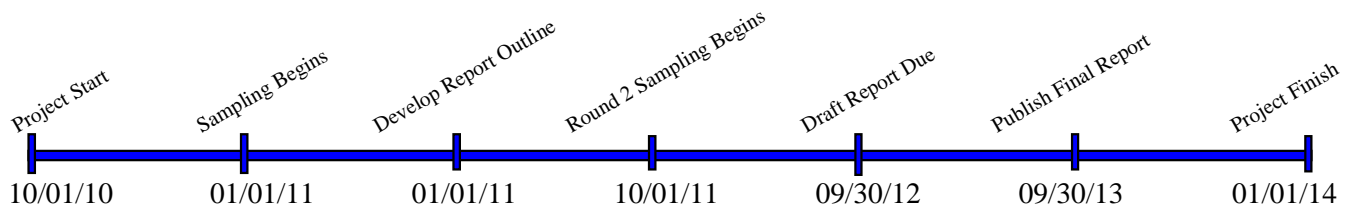
The objective of the study is to assess the occurrence and concentrations of hormone, pharmaceutical and other wastewater compounds at 13 U.S. Geological Survey stream flow gauging stations throughout the San Antonio River watershed. Samples will be analyzed for a suite of over 100 hormone, pharmaceutical, wastewater and antibiotic compounds. Upcoming years' funding will support the second round of sampling and the development of the report outline.

Expenditures	<u>As of 2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	<u>Total</u>
Personnel	\$ 1,000	\$ 2,000	\$ 1,000	\$ 1,000	\$ 5,000
Commodities	-	-	-	-	-
Contracts	70,312	98,250	90,750	21,938	281,250
Total	\$ 71,312	\$ 100,250	\$ 91,750	\$ 22,938	\$ 286,250

Project Revenues by Funding Source:



Project Milestones



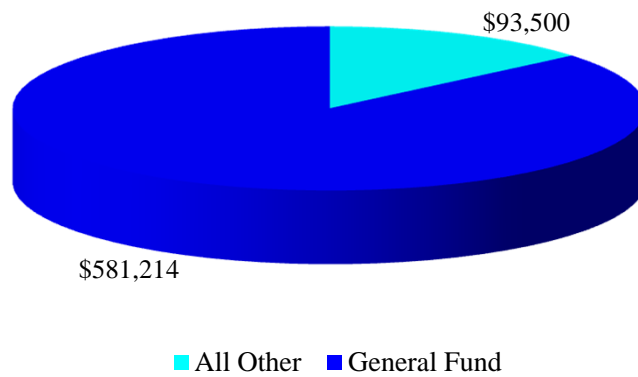
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Estuary Response **Project #** 00000060
Project Start Date: 07/01/08 **Total Project Budget:** \$ 674,714
Project Finish Date: 06/30/14 **Managing Department:** Environmental Sciences

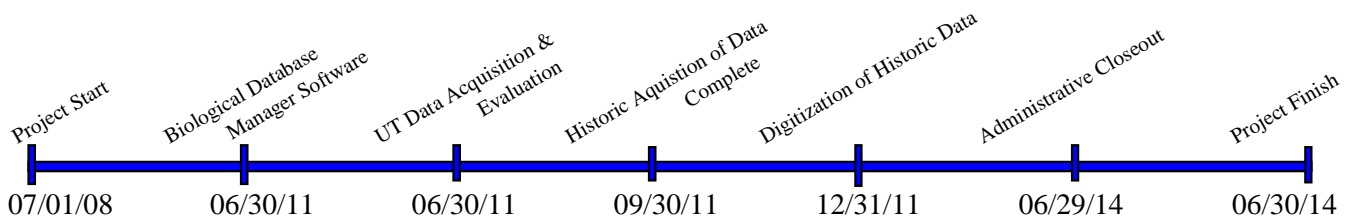
One of the major questions confronting the management of San Antonio Bay as well as the basins of the Guadalupe and San Antonio rivers is the effect of freshwater flow into the estuary (“inflow”) on the ecology of that system. The Estuary Response Project is funded by the River Authority and the Guadalupe-Blanco River Authority to help determine the freshwater inflow requirements of San Antonio Bay by developing and applying models capable of depicting large scale variations in key ecosystem parameters (hydrography, water quality and biology) and their dependence on external factors, freshwater inflow being one of the most important.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ 35,589	\$ 4,000	\$ 4,000	\$ 4,000	\$ 47,589
Commodities	13,997	13,500	13,500	13,500	54,497
Contracts	301,973	94,655	86,000	90,000	572,628
Total	<u>\$ 351,559</u>	<u>\$ 112,155</u>	<u>\$ 103,500</u>	<u>\$ 107,500</u>	<u>\$ 674,714</u>

Project Revenues by Funding Source:



Project Milestones



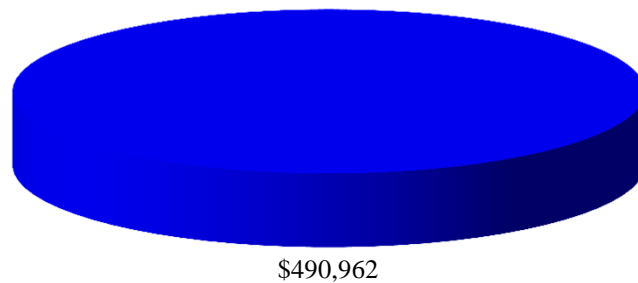
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Instream Flows Planning **Project #** 00000050
Project Start Date: 07/03/06 **Total Project Budget:** \$ 490,962
Project Finish Date: 06/30/12 **Managing Department:** Environmental Sciences

In 2007, the 77th Texas Legislature enacted Senate Bill 2 establishing the Texas Instream Flows Program. The purpose of this program is to perform scientific studies to determine the timing and flow requirements necessary to maintain a sound ecological environment in Texas rivers. The Texas Instream Flows Program established three river sub-basins as priority study areas within the State: Lower Sabine, Middle and Lower Brazos, and Lower San Antonio River (south Bexar County to the confluence with the Guadalupe River). This project has been designed to provide the River Authority staff a funding mechanism to become engaged as a partner in the Texas Instream Flows Program. The River Authority is assisting the State in using appropriate methodologies for the San Antonio River Basin to determine the necessary flow regimes to maintain a sound ecological environment. Inappropriate methodologies could result in regulated flow conditions that may be harmful to the riverine environment or growth within the communities of the San Antonio River Basin.

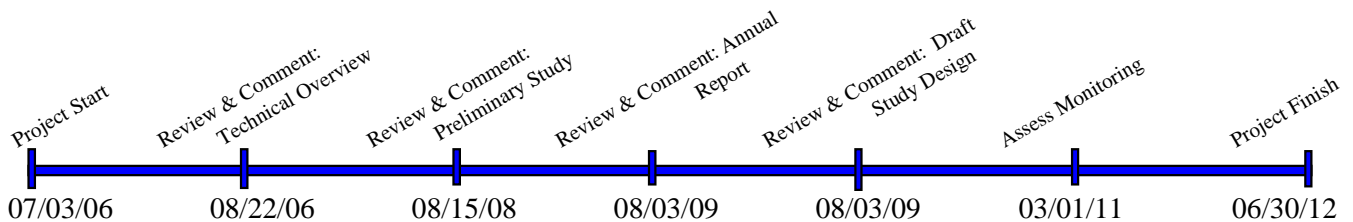
Expenditures	As of			Succeeding	Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>from 2013/14</u>	
Personnel	\$ 153,724	\$ 10,000	\$ -	\$ -	\$ 163,724
Commodities	1,106	2,000	-	-	3,106
Contracts	314,132	10,000	-	-	324,132
Total	<u>\$ 468,962</u>	<u>\$ 22,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 490,962</u>

Project Revenues by Funding Source:



■ General Fund

Project Milestones



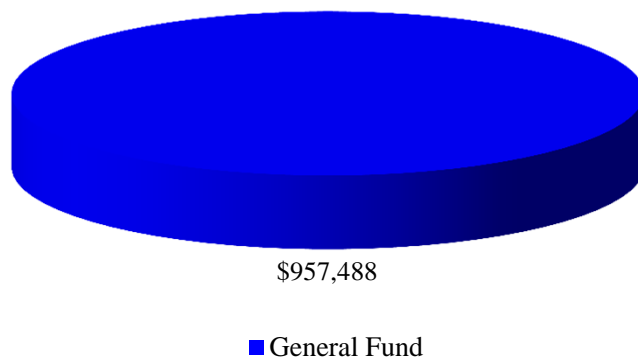
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Instream Flows Study Design & Implementation **Project #** 00000083
Project Start Date: 05/07/06 **Total Project Budget:** \$ 957,488
Project Finish Date: 06/30/12 **Managing Department:** Environmental Sciences

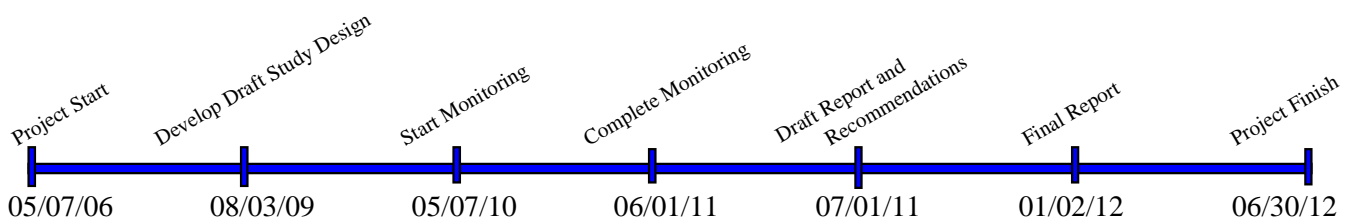
In 2001, the 77th Texas Legislature enacted Senate Bill 2 establishing the Texas Instream Flows Program (TIFP). The purpose of this program is to perform scientific studies to determine the timing and flow requirements necessary to maintain a sound ecological environment in Texas rivers. The State Legislature tasked the Texas Parks and Wildlife Department, Texas Commission on Environmental Quality and the Texas Water Development Board to work with stakeholders to develop instream flow recommendations that will maintain a sound ecological environment for both the instream and riverine habitats. This project encompasses working with the State to develop a peer-reviewed study design for the lower San Antonio River, gathering new scientific data, modeling existing and new data, and developing a report identifying necessary flow regimes to maintain a sound ecological environment.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding <u>from</u> <u>2013/14</u>	
Personnel	\$ 1,000	\$ 1,000	\$ -	\$ -	\$ 2,000
Commodities	182	-	-	-	182
Contracts	955,306	-	-	-	955,306
Total	<u>\$ 956,488</u>	<u>\$ 1,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 957,488</u>

Project Revenues by Funding Source:



Project Milestones



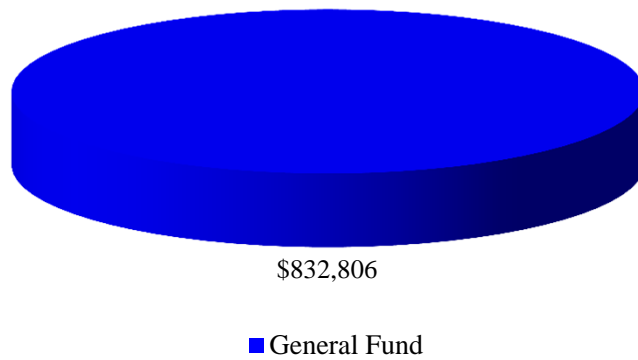
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Instream Flows Verification **Project #** 00000294
Project Start Date: 07/01/11 **Total Project Budget:** \$ 832,806
Project Finish Date: 06/30/15 **Managing Department:** Environmental Science

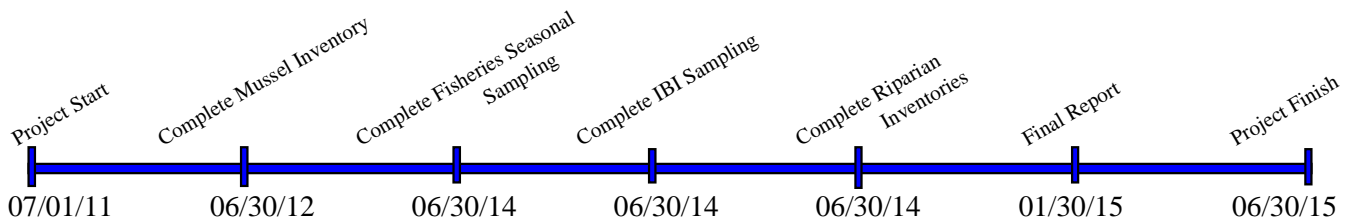
The State’s Environmental Flows Program (Senate Bill 3) allows for adaptive standards for environmental flows to be revisited at least every 10 years. This project will initiate monitoring that will assist the Texas Instream Flows Program (Senate Bill 2) and the Basin and Bay Area Stakeholder Committee (BBASC) in refining the flow recommendations and management strategy(s). The San Antonio River Authority has participated in the Texas Instream Flows Study for the Lower San Antonio River mainly through the efforts of our consultant. This project will engage the River Authority technical staff in the collection of data to be used in models and to verify and refine the flow recommendations already developed. Additionally, River Authority technical staff working with our consultant and the State Agencies will develop in-house expertise and capabilities, a key initiative in the River Authority's vision.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ -	\$ 55,029	\$ 105,815	\$ 116,106	\$ 276,950
Commodities	-	-	-	-	-
Contracts	-	150,000	186,026	219,830	555,856
Total	<u>\$ -</u>	<u>\$ 205,029</u>	<u>\$ 291,841</u>	<u>\$ 335,936</u>	<u>\$ 832,806</u>

Project Revenues by Funding Source:



Project Milestones



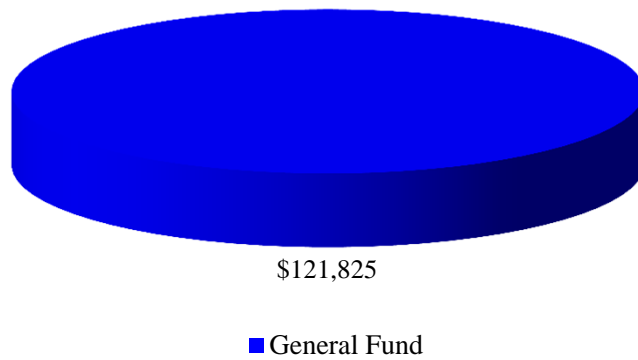
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: LIMS Upgrade **Project #** 00000239
Project Start Date: 07/01/10 **Total Project Budget:** \$ 121,825
Project Finish Date: 12/31/11 **Managing Department:** Environmental Sciences

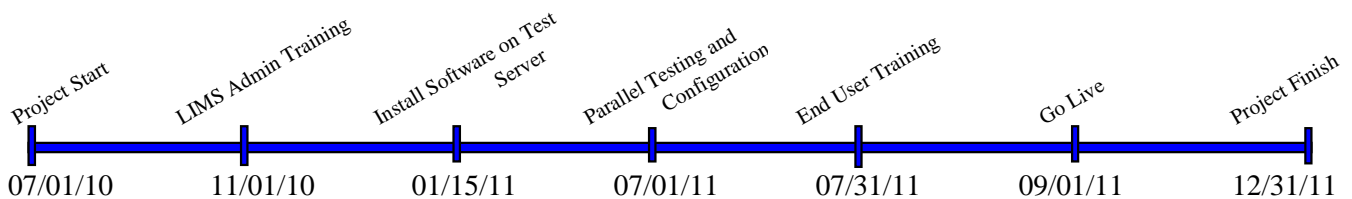
The current version (5.8) of Labworks' Laboratory Information Management System (LIMS) software is exhibiting issues that can be resolved with upgrading to the latest version (6.1). This project will install and implement version 6.1 of Labworks LIMS through a collaborative effort between Information Technology, Environmental Sciences Department, and professional services. The process will involve pre-upgrade research and preparation, training at the administrator and user levels, data migration, and testing of all executables to ensure a properly functioning system once in production.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 30,000	\$ 5,000	\$ -	\$ -	\$ 35,000
Commodities	66,825	-	-	-	66,825
Contracts	15,000	5,000	-	-	20,000
Total	<u>\$ 111,825</u>	<u>\$ 10,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 121,825</u>

Project Revenues by Funding Source:



Project Milestones



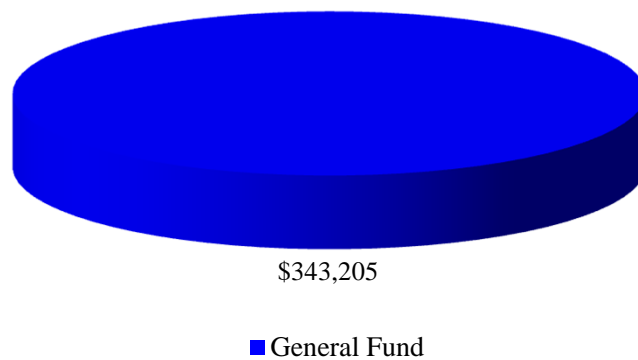
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: SARA Stream Monitoring 2011 **Project #** 00000295
Project Start Date: 07/01/11 **Total Project Budget:** \$ 343,205
Project Finish Date: 06/30/13 **Managing Department:** Environmental Science

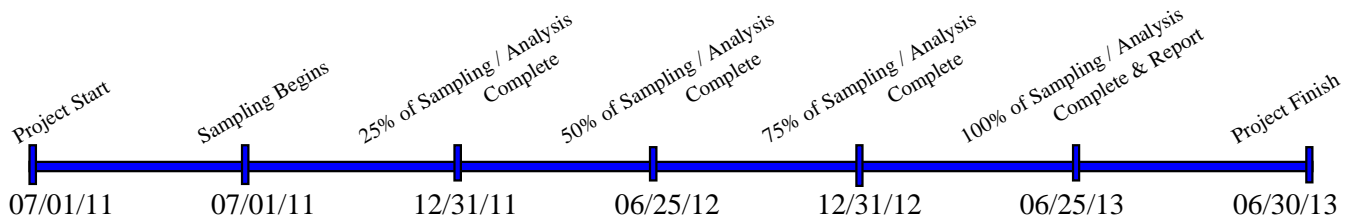
Water quality monitoring under the Texas Clean Rivers Program (CRP) has decreased as the cost of operating the program has increased. At the same time, actual dollars allocated to the River Authority by the CRP have declined. Because of limited State funding, the current surface water monitoring projects need to be augmented to meet the increasing demand for stream water quality, ecosystem health and instream flow information. Thus, the River Authority will continue to collect additional data under the SARA Stream Monitoring Project.

Expenditures	<u>As of</u> <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding</u> <u>from</u> <u>2013/14</u>	<u>Total</u>
Personnel	\$ -	\$ 152,125	\$ 152,125	\$ -	\$ 304,250
Commodities	-	7,695	1,260	-	8,955
Contracts	-	15,000	15,000	-	30,000
Total	<u>\$ -</u>	<u>\$ 174,820</u>	<u>\$ 168,385</u>	<u>\$ -</u>	<u>\$ 343,205</u>

Project Revenues by Funding Source:



Project Milestones



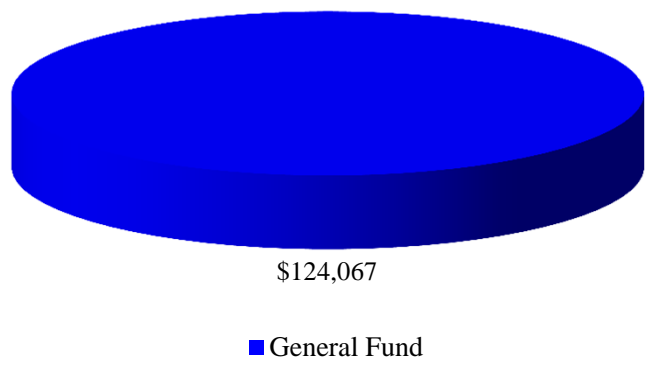
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: SA River Basin Nutrient Loading Survey **Project #** 00000057
Project Start Date: 08/01/07 **Total Project Budget:** \$ 124,067
Project Finish Date: 06/30/12 **Managing Department:** Environmental Sciences

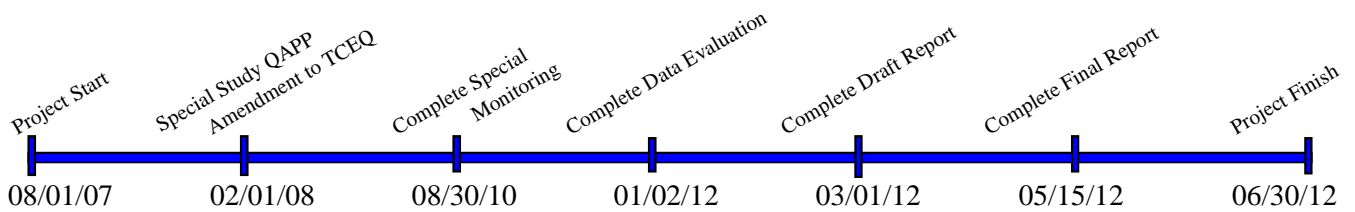
This project will generate San Antonio River Basin nutrient data in advance of the State’s development of stream standards with numerical nutrient criteria for creeks and rivers. The project will characterize the nutrients discharged into the basin from wastewater treatment plants, reuse water, ground water discharge (Edwards Aquifer well and springs), and rainfall. Currently, the Environmental Protection Agency methodology recommended for setting nutrient criteria uses an ecoregion approach. However, in the San Antonio River Basin, the dominant factor affecting levels of nitrogen is not the ecoregion, but the source water for the river and streams that are dominated by water from the Edwards Aquifer. The Edwards Aquifer has approximately ten times the nitrates of the Trinity Aquifer. The goal of this project is to provide basin-specific data to the State so that they may make a more informed decision on future nutrient criteria for the basin.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ 94,259	\$ 20,000	\$ -	\$ -	\$ 114,259
Commodities	7,808	2,000	-	-	9,808
Contracts	-	-	-	-	-
Total	<u>\$ 102,067</u>	<u>\$ 22,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 124,067</u>

Project Revenues by Funding Source:



Project Milestones



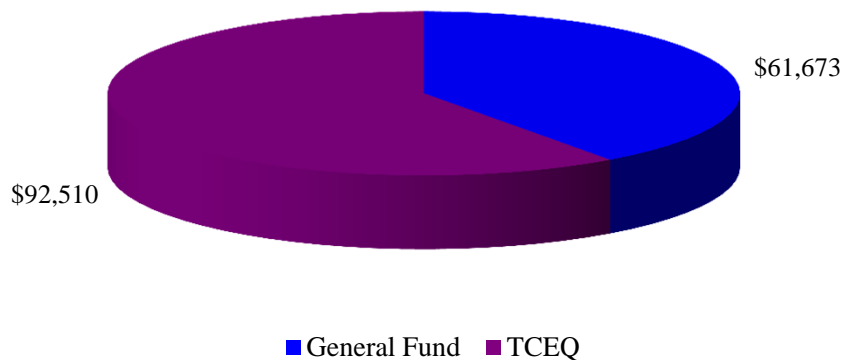
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Upper SAR WPP Revision #1 **Project #** 00000293
Project Start Date: 09/01/11 **Total Project Budget:** \$ 154,183
Project Finish Date: 08/31/13 **Managing Department:** Environmental Sciences

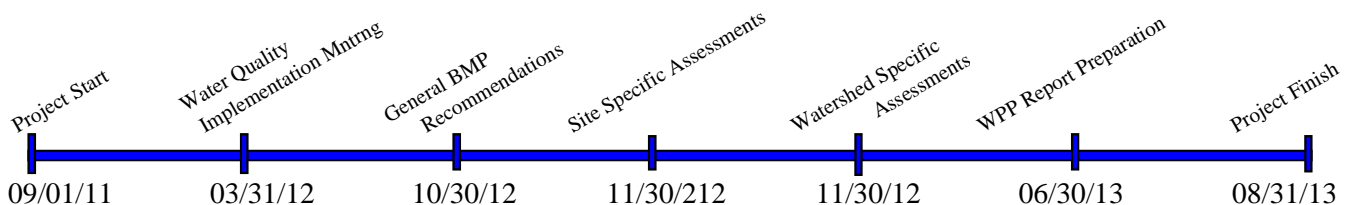
In an effort to enhance the urban reaches of the Upper San Antonio River (segment 1911) and improve and protect water quality, the San Antonio River Authority is proposing to update, revise, and implement the 2006 Upper San Antonio River Watershed Protection Plan (WPP). The revised WPP will identify and propose water quality Best Management Practices (BMPs) that would serve to abate or control Non-Point Source (NPS) pollution of bacteria, sediments and excess nutrients (nitrogen and phosphorous). The water quality goals of the project are to develop a plan for implementation of approved BMPs that would aid in reducing e-coli bacteria NPS loads to segment 1911 of the San Antonio River. The River Authority and Bexar Regional Watershed Management (BRWM) partner’s objective is to have the Upper San Antonio River compliant with State of Texas Surface Water Quality Standards (less than 126 organisms per 100 ml).

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ -	\$ 30,542	\$ 28,709	\$ 1,832	\$ 61,083
Commodities	-	650	611	39	1,300
Contracts	-	45,900	43,146	2,754	91,800
Total	\$ -	\$ 77,092	\$ 72,466	\$ 4,625	\$ 154,183

Project Revenues by Funding Source:



Project Milestones



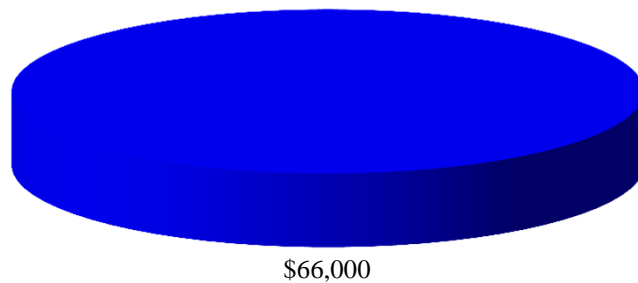
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Water Quality Database & Website Interface **Project #** 00000241
Project Start Date: 07/01/10 **Total Project Budget:** \$ 66,000
Project Finish Date: 10/01/12 **Managing Department:** Environmental Sciences

This project will restructure/format the current surface water quality database schemas to meet the needs of the public and the internal staff at the River Authority, plus include an interactive website with Geographical Informational System (GIS) functionality and accessibility to water quality data. Current year funding will support the cleanup of the surface water quality databases, development of the database and website interface, and completion of the GIS component.

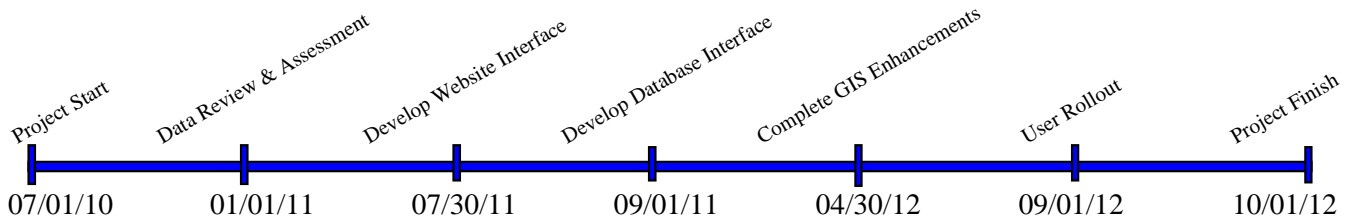
Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 18,230	\$ 32,770	\$ 15,000	\$ -	\$ 66,000
Commodities	-	-	-	-	-
Contracts	-	-	-	-	-
Total	<u>\$ 18,230</u>	<u>\$ 32,770</u>	<u>\$ 15,000</u>	<u>\$ -</u>	<u>\$ 66,000</u>

Project Revenues by Funding Source:



■ General Fund

Project Milestones



Natural Resource Protection Program Efforts

- **IG&CR Department Support**
Support for Intergovernmental/Community Relations (IG/CR) activities, projects and programs includes presenting teacher workshops, making scientific presentations, reviewing press releases and document copy, legislative monitoring, assisting with public outreach, etc.
- **Inter-Agency Support**
This effort provides support for and interaction with other government agencies on non-project or program issues, to include new program or project development, contract negotiations, report review and commentary, workshop support, presentations, and meeting attendance.
- **Interdepartmental Support**
Through this effort, Environmental Sciences Department (ESD) provides support for and interaction with other River Authority departments on non-project or program issues, to include new program or project development, contract review, report review and comments, workshop support, presentations, and meeting attendance.
- **Laboratory Capability Expansion 2011**
This effort will develop laboratory capabilities defined in the Environmental Sciences Department (ESD) Strategic Plan Phase III document to meet project and client analytical testing needs and will also make laboratory operations more efficient. Capabilities to be developed are: Enterolert testing in the microbiology section and hexavalent chromium and ammonia testing using a discrete analyzer.
- **Laboratory Contract Analyses**
This effort provides analytical support under contract with specific laboratory clientele that must comply with public health, regulatory or environmental permits.
- **National Park Service (NPS) Monitoring**
This effort monitors water quality, instream and riparian habitat conditions, and the fish community in the San Antonio Missions National Park to provide data to the National Park Service National Inventory.
- **Recal Fish Community Metrics**
ESD Biologist will re-evaluate the San Antonio River Authority fish community data and will verify, update, and recalibrate IBI (Index of Biotic Integrity) metrics for each sub watershed within the San Antonio River (SAR) basin. Historical fish data collected from the SAR basin will be used to verify metrics and scoring criteria for each IBI metric and make adjustments if needed. Tolerance and trophic designations for fish species collected within the SAR basin will also be re-evaluated for accuracy and possible reclassification. Metrics will be compared with TCEQ and TPWD metrics for accuracy and verification.
- **Texas Department of Transportation (TxDOT) Storm Monitoring**
As a service to the TxDOT, storm water runoff samples collected from a remote automated sampler at the intersection of HWY 151 and Ingram Road are delivered to the River Authority laboratory for analysis. The raw data is made available to TxDOT, which is invoiced monthly for the service.

- **Stream Restoration Mitigation Bank Guidelines**

This effort will evaluate the new U.S. Army Corps of Engineers, Ft. Worth District, mitigation banking guidelines by performing a case study of a specific reach of stream in Bexar County. The case study will use the new guidelines as a test case, evaluate the results with the Corps and attempt to influence them to make positive revisions to the guidelines. In addition, the scope of this effort will include a business plan for a River Authority mitigation bank.

Nature Based Park Program

Established to promote the San Antonio River Authority's goal to enhance community appreciation for the environmental resources of the San Antonio River and its tributaries and to deliver valued public service, this program oversees and/or coordinates all San Antonio River Authority parks projects and efforts.

Branch Property Site Development Project
Helton San Antonio River Nature Park Project
Loop 1604 River Access Site Development Project
Saspamco Paddling Trail Project

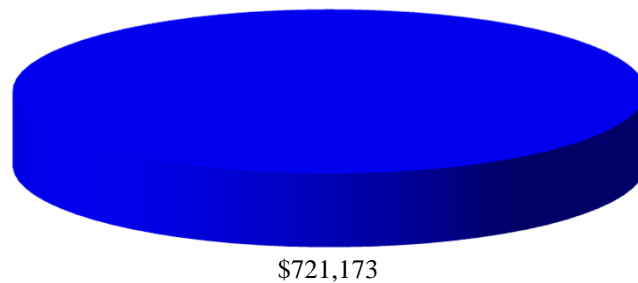
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Branch Property Site Development **Project #** 00000089
Project Start Date: 04/06/09 **Total Project Budget:** \$ 721,173
Project Finish Date: 06/30/15 **Managing Department:** Park Services

This project will fund conceptual design services, site maintenance and improvements to create a day-use outdoor recreational site and explore development of the River Authority's facilities in Goliad, Texas. The Branch site's proximity to the Ferry Street Crossing Paddling Trail, Angel of Goliad Nature Trail, Boy Scout Hall and Town Square will help connect the public to the river and its natural surroundings. This site will benefit the City and County of Goliad, other surrounding communities, service organizations as well as the general public from site maintenance and improvement. Development of the park master plan with input from the community has been completed, and we are in the development of construction detail plans for the carriage house and amphitheater. Other site developments to be constructed at this time include picnic pads, disc golf course, and walking trails.

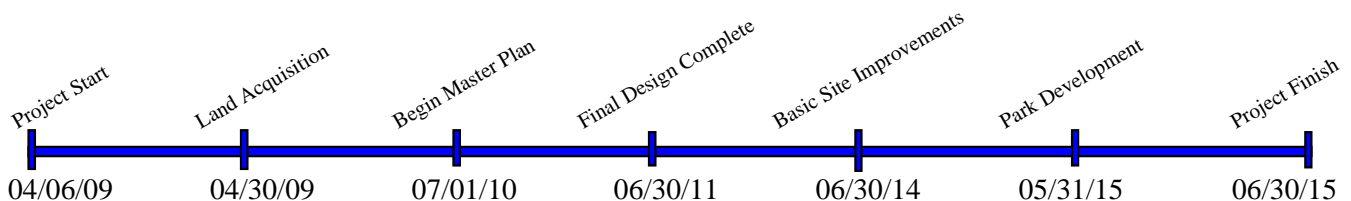
Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding <u>from</u> <u>2013/14</u>	
Personnel	\$ 2,500	\$ 5,000	\$ 5,000	\$ 10,000	\$ 22,500
Commodities	37,618	54,575	300,000	195,000	587,193
Contracts	31,480	30,000	50,000	-	111,480
Total	<u>\$ 71,598</u>	<u>\$ 89,575</u>	<u>\$ 355,000</u>	<u>\$ 205,000</u>	<u>\$ 721,173</u>

Project Revenues by Funding Source:



■ General Fund

Project Milestones



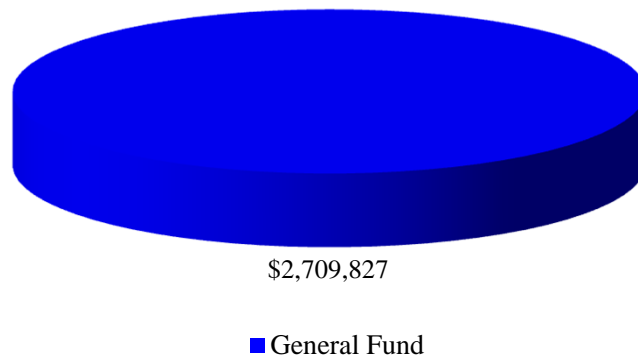
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Helton San Antonio River Nature Park **Project #** 00000067
Project Start Date: 07/01/07 **Total Project Budget:** \$ 2,709,827
Project Finish Date: 06/29/12 **Managing Department:** Park Services

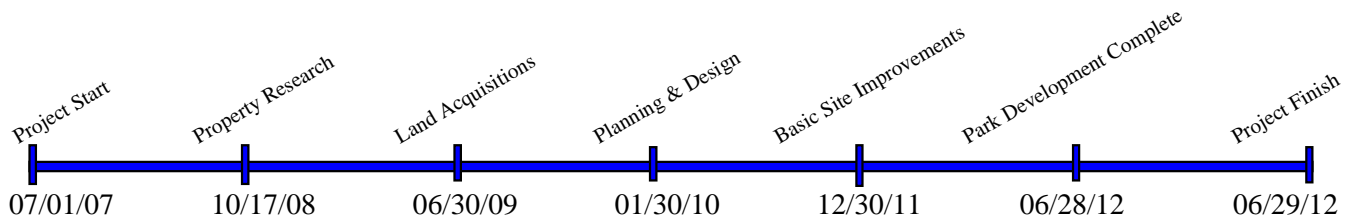
This project will fund design services, land acquisition, construction of park entrance, site improvements, utilities, road, parking, a multi-use pavilion, park toilet pads, picnic units, signage, educational panels, paddling trail access, and a riparian land management demonstration area at the Helton San Antonio River Nature Park. The entire region will benefit from the riparian land management demonstration area where citizens can come to learn how to manage their own lands. The entire region will also benefit from the paddling trail access. Bexar, Wilson, and perhaps other counties' students and general public will benefit from the educational panels/signage and other potential classes/camps. Currently we are developing the detailed construction plans for utilities, roads, parking, trails and picnic areas. These plans will give us the capability to move into the construction phase for these items once funding is available.

Expenditures	As of				Total
	<u>2009/10</u>	<u>2010/11</u>	<u>2011/12</u>	<u>Succeeding from 2012/13</u>	
Personnel	\$ 23,640	\$ 5,000	\$ 5,000	\$ 10,000	\$ 43,640
Commodities	353,709	-	200,000	1,600,000	2,153,709
Contracts	129,028	183,450	200,000	-	512,478
Total	<u>\$ 506,377</u>	<u>\$ 188,450</u>	<u>\$ 405,000</u>	<u>\$ 1,610,000</u>	<u>\$ 2,709,827</u>

Project Revenues by Funding Source:



Project Milestones



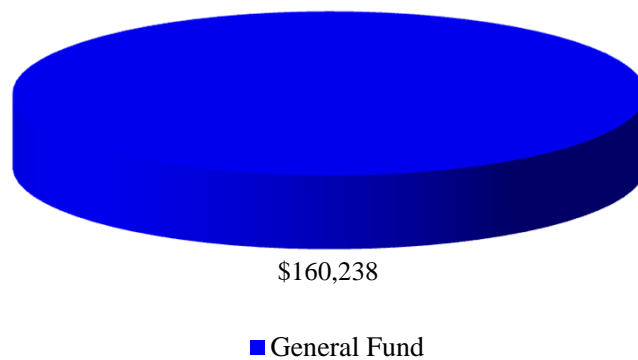
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Loop 1604 River Access Site Development **Project #** 00000090
Project Start Date: 07/30/09 **Total Project Budget:** \$ 160,238
Project Finish Date: 06/30/13 **Managing Department:** Park Services

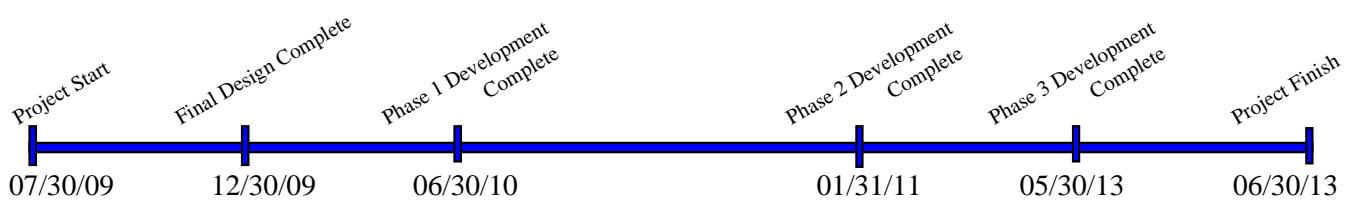
Through development of site infrastructure and day-use outdoor recreational facilities, this project will provide opportunities to connect the public with the river and establish paddling trail access in conjunction with Helton San Antonio River Nature Park development. Some of the proposed enhancements for the Loop 1604 site will include paved parking, restroom facilities, and a covered pavilion. A natural walking trail will be situated along native plantings and grasses and will connect to several picnic areas and overlooks of the river. The site will also include an outdoor classroom and launch area for canoes and kayaks. All natural or “Green” recycled materials will be used in the construction enhancements of this park.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 5,000	\$ 5,000	\$ 5,000	\$ -	\$ 15,000
Commodities	70,238	-	75,000	-	145,238
Contracts	-	-	-	-	-
Total	<u>\$ 75,238</u>	<u>\$ 5,000</u>	<u>\$ 80,000</u>	<u>\$ -</u>	<u>\$ 160,238</u>

Project Revenues by Funding Source:



Project Milestones



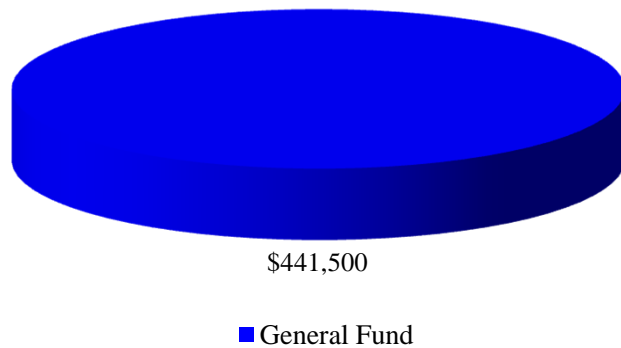
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Saspamco Paddling Trail River Access **Project #** 00000298
Project Start Date: 02/01/11 **Total Project Budget:** \$ 441,500
Project Finish Date: 06/30/14 **Managing Department:** Park Services

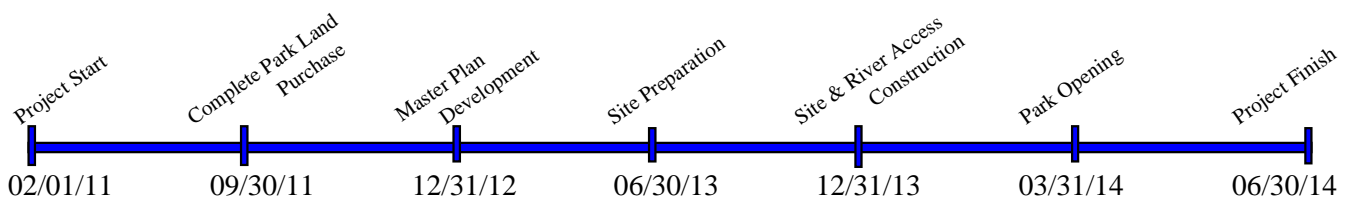
This project funds the purchase of approximately five acres of land situated midway between 1604 river access site and Helton San Antonio River Nature Park which will be used as alternative put-in and take-out for the Saspamco paddling trail located near Saspmaco, Texas. This location will also provide an additional area for day use recreational park activities, such as picnic pads and walking trail.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ -	\$ 1,500	\$ 50,000	\$ 20,000	\$ 71,500
Commodities	58,200	-	50,000	200,000	308,200
Contracts	1,800	-	55,000	5,000	61,800
Total	<u>\$ 60,000</u>	<u>\$ 1,500</u>	<u>\$ 155,000</u>	<u>\$ 225,000</u>	<u>\$ 441,500</u>

Project Revenues by Funding Source:



Project Milestones



Nature Based Park Program Efforts

- **Nature Park Operations**

The River Authority operates and manages Jackson Nature Park for Wilson County. It is open during daylight hours only, seven days a week. The Helton San Antonio River Nature Park is owned by the River Authority, is in the development phase and will also be operated and managed by the River Authority.

- **Paddling Trail Operations**

The River Authority operates and maintains the Goliad Paddling Trail public access sites located at the Ferry Street Crossing and Highway 59 bridge.

- **Regional Park Coordinating Council**

Council members are citizens from Bexar, Wilson, Karnes and Goliad counties who provide input as stakeholders to the River Authority's park projects. The Regional Park Coordinating Council meets quarterly, and as needed.

Sustainable Watersheds Implementation Program

This program will seek to maximize the sustainability of the San Antonio River Authority programs and projects and create visible change in our environment by working on implementation of projects, efforts, and practices that improve our communities' sustainability. This program will incorporate the following:

- Stream Restoration
- Storm Water Best Management Practices (BMPs)
- Low Impact Development, Green Infrastructure, and Sustainable Sites Initiative
- Preservation and Stewardship
- Watershed Master Plan and Watershed Protection Plan Implementation
- Municipal Separate Storm Sewer System (MS4) efforts

Leon Creek Holistic Watershed Master Plan Project

Medina River Holistic Watershed Master Plan Project

Non-point Runoff Modeling & Best Management Practices Strategies Project

Olmos Creek Basin Alliance Stormwater Best Management Practices Project

Salado Creek Watershed Master Plan

San Antonio River Improvement Project Outfalls Assessment Project

Stream Restoration Projects

 E. Salatrillo Creek Project

 Huebner Creek Project – Leon Valley

 Huebner Creek Project – SAWS

 Support Project

Upper San Antonio River Holistic Watershed Master Plan Project

Westside Creeks Restoration Project

**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

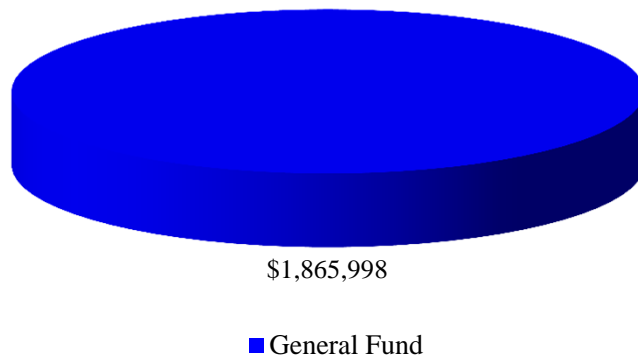
Project Name: Leon Creek Holistic Watershed Masterplan **Project #** 00000063

Project Start Date: 04/01/08 Total Project Budget: \$ 1,865,998
 Project Finish Date: 06/30/13 Managing Department: Watershed Management

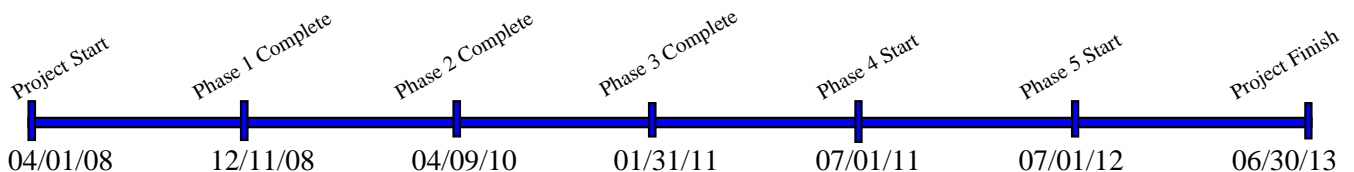
The goal of this project is the development of a comprehensive watershed master plan for the Leon Creek Watershed in Bexar County. Given the existing watershed's density and projected growth of development, the initial phases of the project focused on evaluating flooding conditions and proposing feasible mitigation solutions. Subsequent phases will incorporate other strategies such as improving water quality, identifying appropriate low impact development (LID) techniques, identifying stream restoration and mitigation banking opportunities, and investigating sustainable solutions to keep the watershed physically, chemically and biologically healthy. Additionally, River Health Index criteria and goals will be major considerations for the project. The project will provide Bexar Regional Watershed Management (BRWM) stakeholders a watershed master plan that will assist them in floodplain management and long-term development efforts. The project will promote practices that help improve and sustain the health of the Leon Creek watershed.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ 45,000	\$ 30,000	\$ 40,000	\$ -	\$ 115,000
Commodities	-	-	-	-	-
Contracts	1,325,998	75,000	350,000	-	1,750,998
Total	\$ 1,370,998	\$ 105,000	\$ 390,000	\$ -	\$ 1,865,998

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

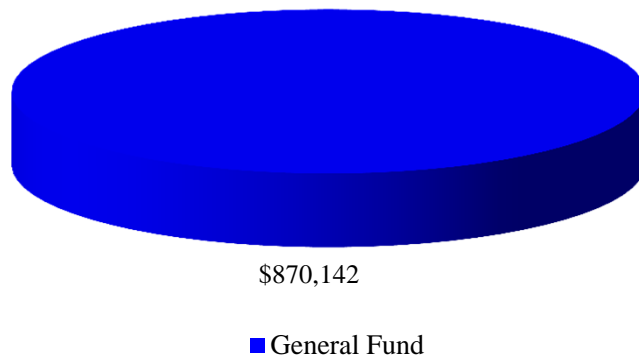
Project Name: Medina River Holistic Watershed Master Plan **Project #** **00000286**

Project Start Date: 07/01/11 Total Project Budget: \$ 870,142
 Project Finish Date: 06/30/13 Managing Department: Watershed Management

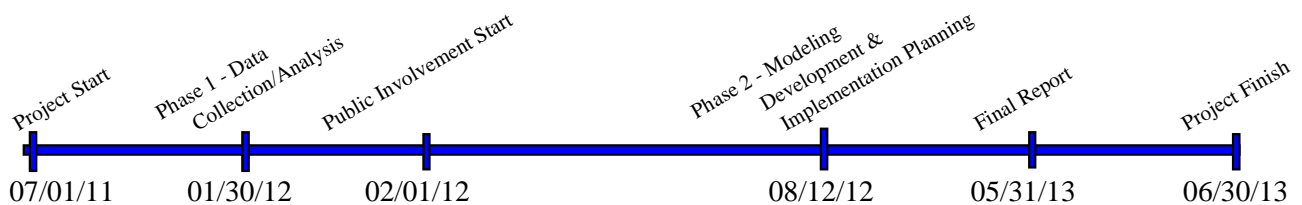
This project will develop a comprehensive watershed master plan for the Medina River Watershed, one of the major watersheds in Bexar County. This project will follow the methodology of the Upper San Antonio River and Leon Creek Watershed Master Plan studies and will identify major flooding reaches and damage centers (areas of numerous structures in the floodplain) within the selected watershed. Potential mitigation solutions such as detention, channelization, and/or buyouts for select sites will be investigated. The project will seek to maximize SARA’s sustainability program efforts and potentially identify preliminary locations for Regional Storm Water Facilities and outline a plan of implementation. The project will increase the library of watershed master plans in Bexar County.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 10,000	\$ 125,071	\$ 135,071	\$ -	\$ 270,142
Commodities	-	-	-	-	-
Contracts	-	300,000	300,000	-	600,000
Total	<u>\$ 10,000</u>	<u>\$ 425,071</u>	<u>\$ 435,071</u>	<u>\$ -</u>	<u>\$ 870,142</u>

Project Revenues by Funding Source:



Project Milestones



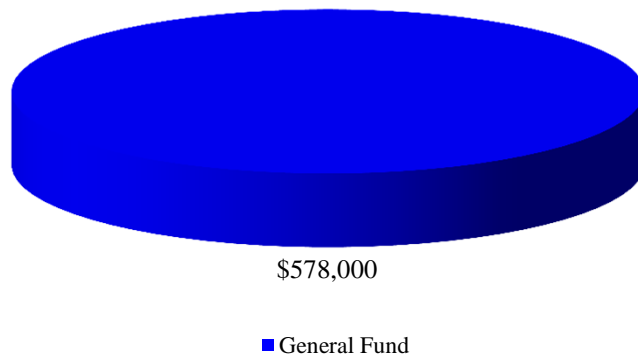
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Non-Point Runoff Modeling & BMP Strategies **Project #** 00000341
Project Start Date: 04/05/11 **Total Project Budget:** \$ 578,000
Project Finish Date: 06/30/12 **Managing Department:** Watershed Mgmt

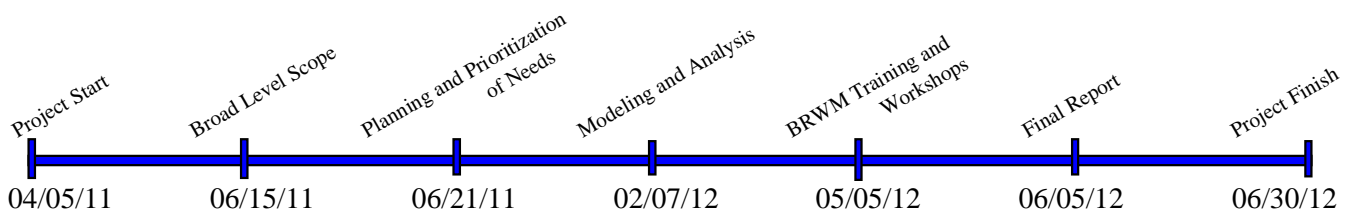
The objective of this project is to develop a Water Quality Implementation Program for improved water quality in the water bodies in Bexar County. This project will propose a watershed-based approach which will include a wide range of water sources in order to produce desired environmental results. Several major tasks include, but are not limited to, development of comprehensive and dynamic water quality models in the watersheds in Bexar County, recommendation of sustainable technologies, review of storm water programs in the regulatory agencies and development of an integrated vegetation management program. Opportunities for application of triple bottom line analysis of cost, environment and quality of life components will be explored with the associated tasks.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 30,000	\$ 80,000	\$ -	\$ -	\$ 110,000
Commodities	-	-	-	-	-
Contracts	6,000	462,000	-	-	468,000
Total	<u>\$ 36,000</u>	<u>\$ 542,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 578,000</u>

Project Revenues by Funding Source:



Project Milestones



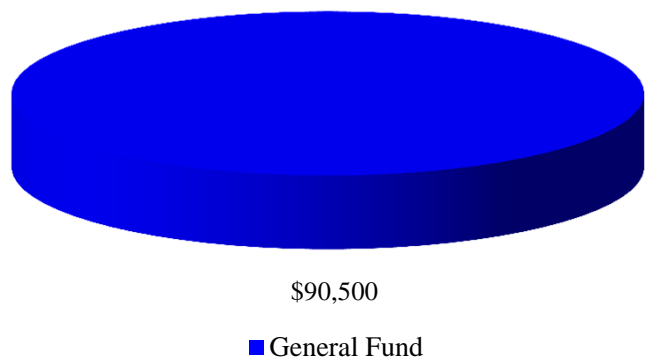
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Olmos Basin Alliance Stormwater BMPs **Project #** 00000311
Project Start Date: 04/21/11 **Total Project Budget:** \$ 90,500
Project Finish Date: 06/30/13 **Managing Department:** Executive Offices

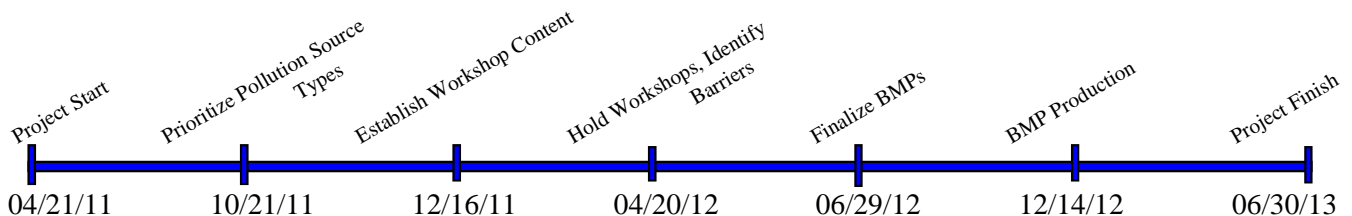
This project will use the Environmental Protection Agency's (EPA's) Getting in Step watershed outreach method to guide the Olmos Basin Alliance in reducing human-made trash. The project will identify target audiences (polluters) within the project area and hold outreach workshops with them to identify their reasons for polluting, the barriers that could prevent them from stopping behaviors that lead to pollution, how they receive information, and the types of information they respond well to. Based on input received from the target audiences, the project will help remove barriers as appropriate and develop and distribute Best Management Practices (BMP) messages to curb or stop the pollution.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ 5,000	\$ 10,000	\$ 15,000	\$ -	\$ 30,000
Commodities	-	-	10,500	-	10,500
Contracts	25,000	-	25,000	-	50,000
Total	<u>\$ 30,000</u>	<u>\$ 10,000</u>	<u>\$ 50,500</u>	<u>\$ -</u>	<u>\$ 90,500</u>

Project Revenues by Funding Source:



Project Milestones



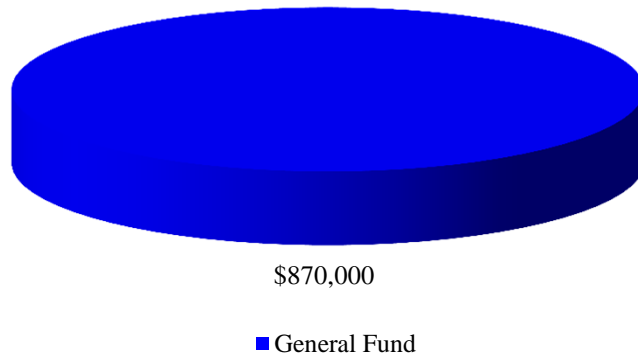
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Salado Creek Watershed Master Plan **Project #** 00000210
 Project Start Date: 12/01/09 Total Project Budget: \$ 870,000
 Project Finish Date: 06/30/12 Managing Department: Watershed Management

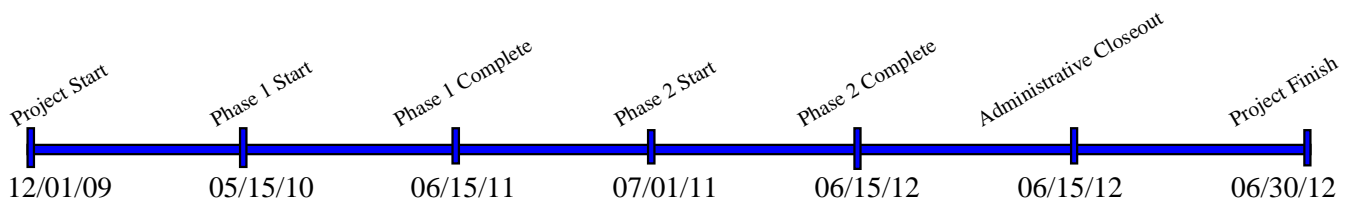
The objective of this project is to develop a comprehensive watershed master plan (WMP) for the entire Salado Creek watershed in Bexar County tailored to the unique characteristics and issues in the watershed. Given the presence of 13 Dams in the upper Salado Creek watershed, the analyses performed and the conceptual projects recommended as a result of this study includes additional alternatives that may not have been considered in the studies for the Leon Creek and San Antonio River watersheds. Such options include the possibility of channel modifications seeking both to increase conveyance and provided opportunities for environmental restoration. However subsequent phases will incorporate major components such as improving water quality in the creeks and rivers, appropriate low impact development techniques wherever applicable and other sustainable solutions to keep the watershed physically, chemically and biologically healthy.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ 20,000	\$ 75,000	\$ -	\$ -	\$ 95,000
Commodities	-	-	-	-	-
Contracts	438,200	336,800	-	-	775,000
Total	\$ 458,200	\$ 411,800	\$ -	\$ -	\$ 870,000

Project Revenues by Funding Source:



Project Milestones



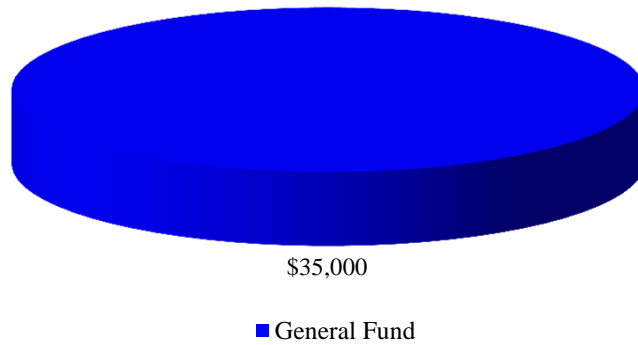
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: SARIP Outfalls Assessment **Project #** 00000302
Project Start Date: 07/01/11 **Total Project Budget:** \$ 35,000
Project Finish Date: 06/30/12 **Managing Department:** Engineering

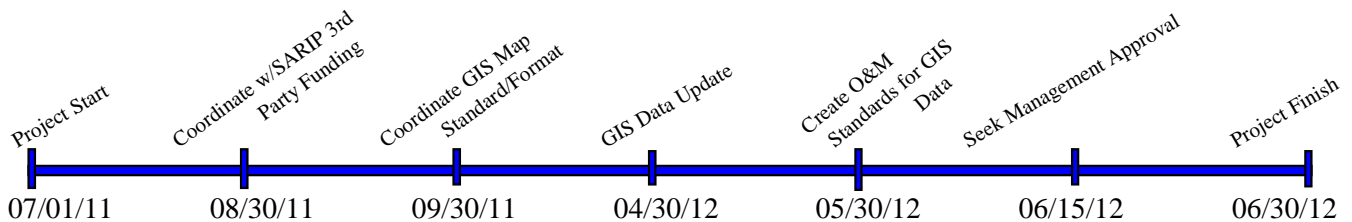
This project will use in-house expertise to initiate the assessment of the storm water inlets, outlets, outfalls and best management practices (BMPs) for the SARIP project stretch; and delineate and map storm sewer systems and their catchment areas for the storm sewer systems that outfall directly to the San Antonio River along the Museum Reach (Phase I of Park Segment and Urban Reach), Eagleland Segment, and Mission Reach. The information will ultimately be used to prepare a BMP master plan that will identify sustainable BMP alternatives that can be implemented to improve water quality in the River. This phase will involve delineation and mapping of the storm sewer systems discharging directly to the San Antonio River and their catchment areas, and will focus on collection and assembly of data.

Expenditures	<u>As of</u> <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding</u> <u>from</u> <u>2013/14</u>	<u>Total</u>
Personnel	\$ -	\$ 35,000	\$ -	\$ -	\$ 35,000
Commodities	-	-	-	-	-
Contracts	-	-	-	-	-
Total	\$ -	\$ 35,000	\$ -	\$ -	\$ 35,000

Project Revenues by Funding Source:



Project Milestones



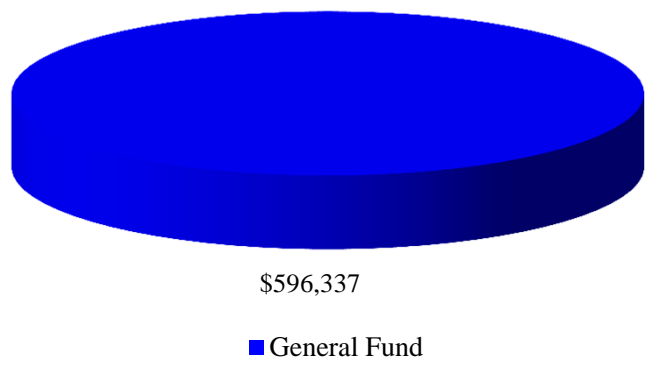
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Stream Restoration East Salatrillo Creek **Project #** 00000012
Project Start Date: 09/30/09 **Total Project Budget:** \$ 596,337
Project Finish Date: 06/30/12 **Managing Department:** Engineering

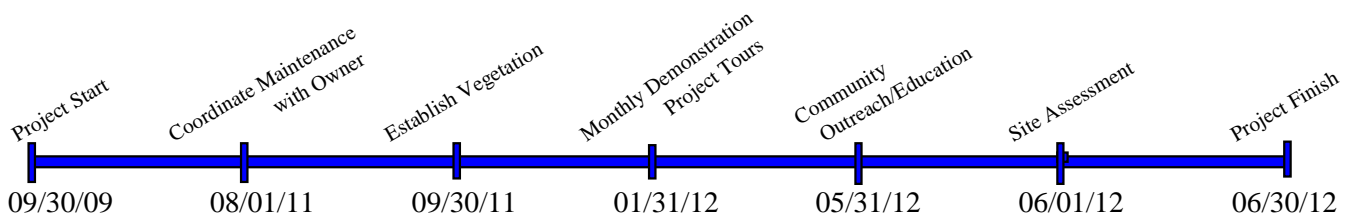
This project will be a demonstration project on Judson High School Campus in which 1,000 linear feet of stream will be realigned using naturally sustainable stream design techniques to improve bank stability and improve the riparian ecosystem features. River Authority staff will assist a consultant with design and field work to help build in-house expertise for future projects of the River Authority and to share with other public and private entities. The project also funds demonstration tours and public outreach and education.

Expenditures	As of		Succeeding		Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	
Personnel	\$ 259,032	\$ 14,000	\$ -	\$ -	\$ 273,032
Commodities	150,037	7,769	-	-	157,806
Contracts	95,072	70,427	-	-	165,499
Total	\$ 504,141	\$ 92,196	\$ -	\$ -	\$ 596,337

Project Revenues by Funding Source:



Project Milestones



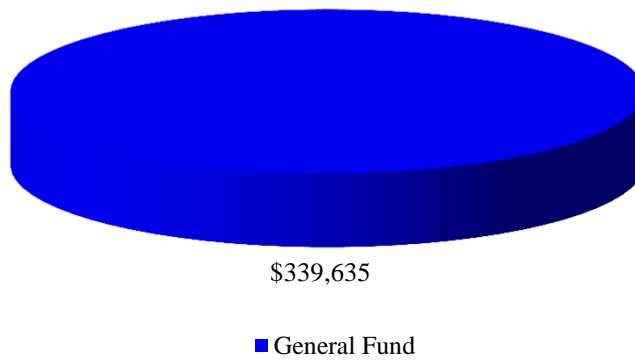
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: SRP- Huebner Creek-Leon Valley **Project #** 00000304
Project Start Date: 07/01/11 **Total Project Budget:** \$ 339,635
Project Finish Date: 10/31/12 **Managing Department:** Engineering

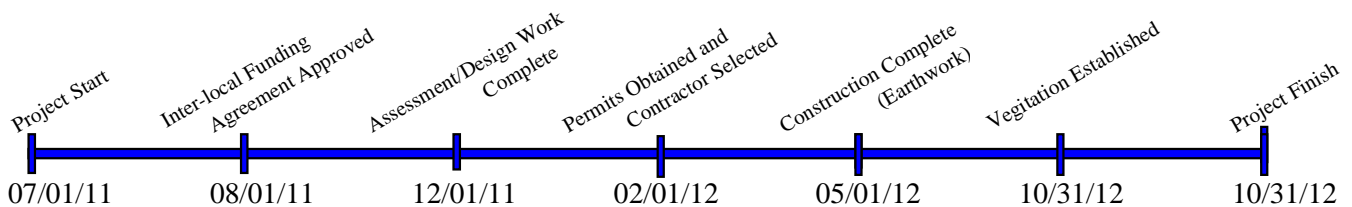
Partnering with Leon Valley, this project will provide the design for a natural stream restoration of Huebner Creek, directly upstream of the SRP Huebner Creek SAWS project. This unstable and eroding channel will be stabilized using natural channel design methodology and will provide the community another needed example of the use of sustainable storm water management practices in this urbanized watershed. The project will also prevent sediment from this area from adversely impacting downstream channel conditions and other restoration work. The 1200 feet of unfit channel will be restored with natural resources and vegetation that promote diverse biological activity.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding <u>from 2013/14</u>	
Personnel	\$ -	\$ 134,635	\$ 5,000	\$ -	\$ 139,635
Commodities	-	-	-	-	-
Contracts	-	200,000	-	-	200,000
Total	<u>\$ -</u>	<u>\$ 334,635</u>	<u>\$ 5,000</u>	<u>\$ -</u>	<u>\$ 339,635</u>

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: SRP- Huebner Creek-SAWS **Project #** 00000287
Project Start Date: 05/01/11 **Total Project Budget:** \$ 423,635
Project Finish Date: 10/31/12 **Managing Department:** Engineering

Partnering with the San Antonio Water Systems this project will provide the design for a natural stream restoration of Huebner Creek. This unstable and eroding channel will be stabilized using natural channel design methodology and will provide the community another needed example of the use of sustainable storm water management practices in this urbanized watershed. The project will also prevent sediment from this area from adversely impacting downstream channel conditions. The 1000 feet of unfit channel will be restored with natural resources and vegetation that promote diverse biological activity.

Expenditures	<u>As of 2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	<u>Total</u>
Personnel	\$ 30,000	\$ 134,635	\$ 5,000	\$ -	\$ 169,635
Commodities	-	-	-	-	-
Contracts	30,000	224,000	-	-	254,000
Total	<u>\$ 60,000</u>	<u>\$ 358,635</u>	<u>\$ 5,000</u>	<u>\$ -</u>	<u>\$ 423,635</u>

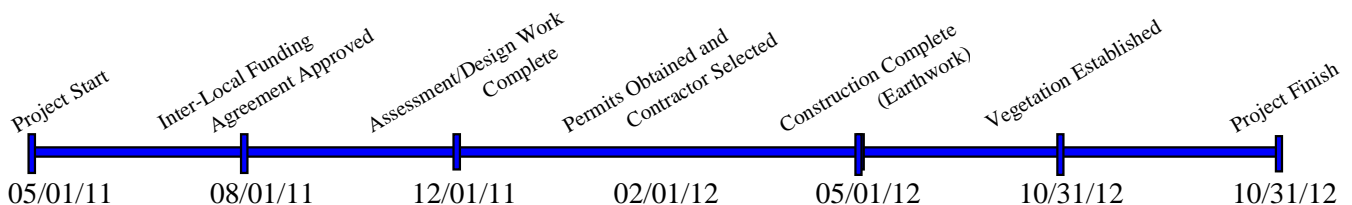
Project Revenues by Funding Source:



\$423,635

■ General Fund

Project Milestones



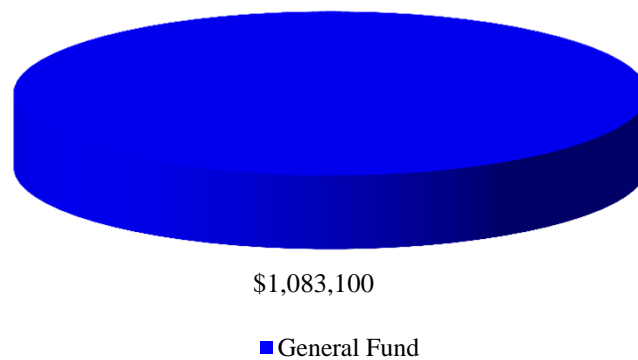
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Stream Restoration Support **Project #** 00000011
 Project Start Date: 06/01/08 Total Project Budget: \$ 1,083,100
 Project Finish Date: 06/30/12 Managing Department: Engineering

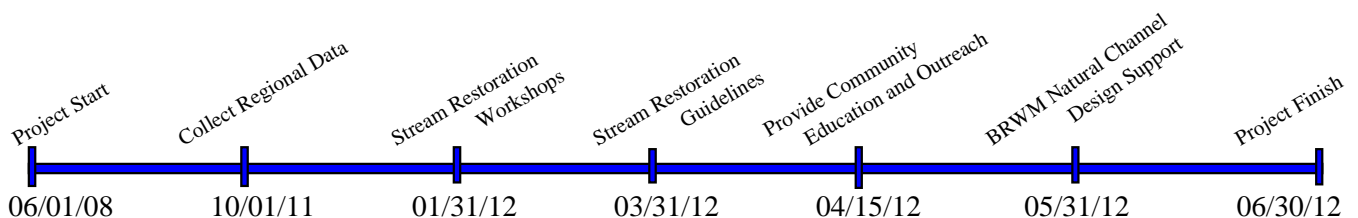
The project goal is to produce sustainable stream restoration projects of value for the citizens of the District and use these examples to promote and educate the public on the advantages of natural resource management solutions to maintaining creeks and rivers. The project uses a multi-discipline team approach to assess, design, permit, construct, and monitor stream bank restoration projects. Detailed regional design guidelines and data will be developed to provide SARA and the community the technical design tools needed for a natural channel design methodology to be implemented. The scope of work also includes watershed based inventory and assessments; coordination and review of existing projects/programs with partner agencies; workshops and certification of staff, consultants and contractors; and public education and outreach. Technical design goals are to stabilize stream channel morphology, restore native aquatic and riparian habitat, and promote best management practices to improve water quality.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ 358,713	\$ 310,000	\$ -	\$ -	\$ 668,713
Commodities	46,010	-	-	-	46,010
Contracts	252,698	115,679	-	-	368,377
Total	\$ 657,421	\$ 425,679	\$ -	\$ -	\$ 1,083,100

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Upper SAR Holistic Watershed Master Plan **Project #** 00000080
Project Start Date: 07/01/09 **Total Project Budget:** \$ 1,444,260
Project Finish Date: 06/25/13 **Managing Department:** Watershed Management

The goal of this project is the development of a comprehensive watershed master plan for the Upper San Antonio River Watershed in Bexar County. Given the watershed's high density of development, the initial phases of the project are focusing on evaluating flooding conditions and proposing feasible mitigation solutions. However subsequent phases will incorporate major components such as improving water quality in the creeks and rivers, appropriate low impact development techniques wherever applicable and other sustainable solutions to keep the watershed physically, chemically and biologically healthy.

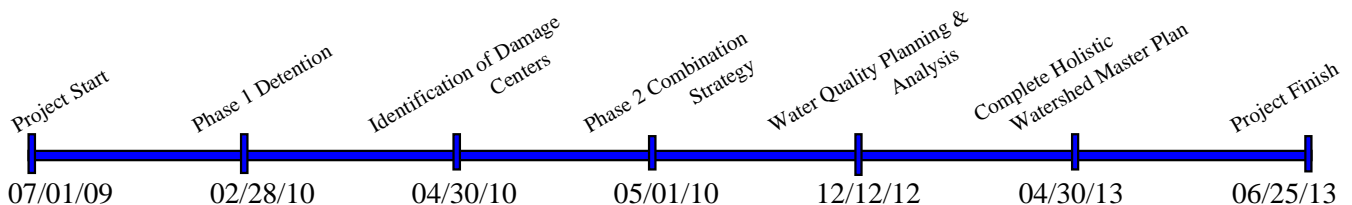
Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 20,000	\$ 40,000	\$ 15,000	\$ -	\$ 75,000
Commodities	-	-	-	-	-
Contracts	600,000	419,260	350,000	-	1,369,260
Total	<u>\$ 620,000</u>	<u>\$ 459,260</u>	<u>\$ 365,000</u>	<u>\$ -</u>	<u>\$ 1,444,260</u>

Project Revenues by Funding Source:



\$1,444,260
■ General Fund

Project Milestones



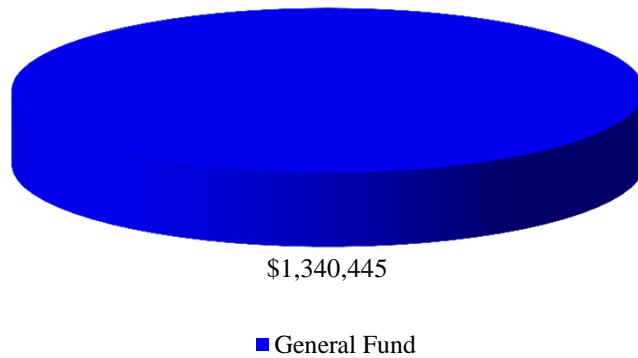
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Westside Creeks Restoration **Project #** 00000002
Project Start Date: 09/27/07 **Total Project Budget:** \$ 1,340,445
Project Finish Date: 06/30/12 **Managing Department:** WRCD

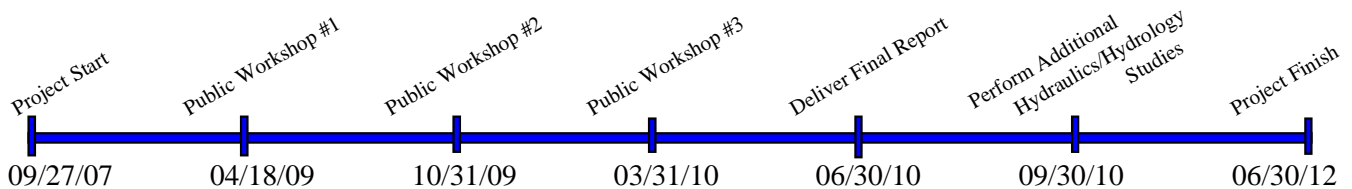
The conceptual phase of the Westside Creeks Restoration Project is a community-based planning effort initiated in 2008 by the San Antonio River Authority to (1) develop concepts for restoring the environmental condition of approximately 14 miles of the Alazán, Apache, Martínez, and San Pedro creeks; (2) maintain the current flood control capacity of these creeks; and (3) provide increased opportunities for people to enjoy these urban creeks. The Conceptual Design Phase includes a significant public involvement effort led by an oversight committee comprised of two co-chairs and community leaders representing 20 organizations throughout the City of San Antonio and its Westside. The project's aim is to create concepts for restoring the creeks in keeping with the rich historical and cultural background of the community. The project will seek to incorporate key historical and cultural features into the design. The project will provide concepts for ecosystem restoration that will increase the biological stability of the creeks and reintroduce native plants and wildlife. Community input has driven the design concepts for environmental restoration of the creeks while maintaining efficient and effective flood control and will in fiscal year 2011/12 incorporate additional hydraulics and hydrology studies.

Expenditures	As of		Succeeding		<u>Total</u>
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	
Personnel	\$ 200,000	\$ 40,000	\$ -	\$ -	\$ 240,000
Commodities	9,945	500	-	-	10,445
Contracts	890,000	200,000	-	-	1,090,000
Total	<u>\$ 1,099,945</u>	<u>\$ 240,500</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,340,445</u>

Project Revenues by Funding Source:



Project Milestones



Sustainable Watersheds Implementation Program Efforts

- **Edwards Aquifer Recovery Implementation Plan Support**

This collaborative regional effort supports recovery of endangered and threatened species that rely on the Edwards Aquifer and springs. The River Authority involvement includes contributing funding for program management and staff participation in steering committee and subcommittee meetings and activities.

- **Land Stewardship**

This effort will stay abreast of conservation easements in the River Authority's district. In addition, we will focus on promoting the concept of conservation easements.

- **LID/Sustainability Audit**

The River Authority owns property and buildings throughout the San Antonio River watershed and is interested in researching sustainable stormwater management practices to implement at its facilities. The objective of the audit is to identify innovative and sustainable stormwater management practices most suitable for the Guenther and Euclid properties.

The deliverable will be a planning document for potential sustainable initiatives at the Guenther and Euclid properties. The document will include a stormwater audit, potential sustainable technologies and approaches, conceptual layouts, and preliminary modeling for each named property.

Tasks going into the *LID Assessment and Stormwater Audit – Euclid and Guenther* will include the following:

- A review of Uniform Develop Code looking for barriers
- Site visit and interviews at each location
- Review existing stormwater management plans
- Identify challenges areas (low spots, flooding, erosion, etc)
- Develop potential solutions
- Develop conceptual layouts
- Create preliminary before and after hydrographs
- Develop audit results and planning document

This document may also possibly serve as a model for researching sustainable stormwater practices at other properties the River Authority owns.

- **River Walk Watershed Alliance Best Management Practices (BMPs)**

Working through the River Walk Watershed Alliance, this effort will continue the watershed Best Management Practices (BMPs) campaign begun under the River Walk Implementation Program, a 3-year project that ended August 31, 2010. The focus will be ensuring that bacteria levels continue to drop. Activities include verifying that River Walk stakeholders are utilizing their BMP materials in River Walk staff training and orientation or by displaying them to the public; conducting outreach to newly-identified stakeholders; and potentially soliciting new River Walk stakeholders to participate on the Alliance.

Utilities Program

This is a department-specific program that manages all of Utilities' water systems, wastewater systems, reuse, and collection systems and related projects and efforts.

Alamo Community College District First Responder Wastewater Treatment Plant Project
City Metering for Salatrillo Wastewater Treatment Plant Project
Creekwood Water System Improvements Project
Graytown Road Wastewater System Development Project
Martinez II Wastewater Treatment Plant Expansion Project
Randolph Air Force Base Year 8 (2011) Project
Randolph Air Force Base Year 9 (2012) Project
Salatrillo Belt Press Replacement Project
Salatrillo Reuse Project
Salatrillo Wholesale System Inflow & Infiltration Project
SARA Wastewater System Inflow & Infiltration Project
SARA Wastewater Security & Vulnerability Assessment Project
Utilities Supervisory Control & Data Acquisition (SCADA) System Project
Efforts

**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

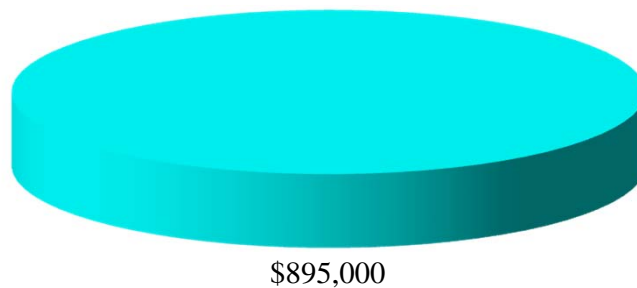
Project Name: ACCD First Responder WWTP **Project #** 00000227

Project Start Date: 01/12/10 Total Project Budget: \$ 895,000
 Project Finish Date: 12/30/13 Managing Department: Engineering

The overall scope includes permitting, design, construction, and operation of a 50,000 gallons per day (GPD) advanced secondary wastewater treatment plant for the Alamo Community College District. The campus is located in far southwest Bexar County, near the intersection of Loop 1604 and IH 35 South. The purpose of this particular campus (First Responders Campus) is to provide training to firemen, Emergency Medical Technicians (EMT), law enforcement, etc.

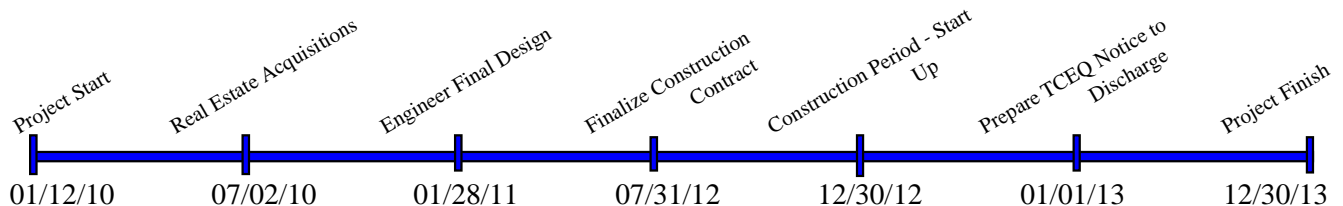
Expenditures	As of			Succeeding	Total
	2010/11	2011/12	2012/13	from 2013/14	
Personnel	\$ 34,000	\$ 18,000	\$ -	\$ -	\$ 52,000
Commodities	550	1,450	-	-	2,000
Contracts	1,000	840,000	-	-	841,000
Total	\$ 35,550	\$ 859,450	\$ -	\$ -	\$ 895,000

Project Revenues by Funding Source:



■ Alamo Community College District

Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

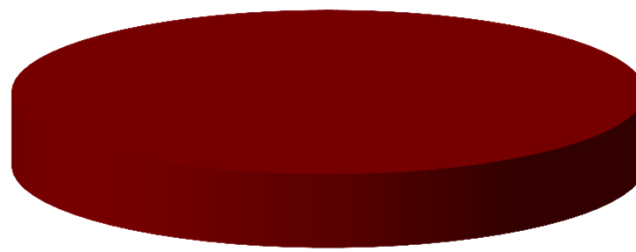
Project Name: City Metering for Salatrillo WWTP **Project #** 00000251

Project Start Date: 11/01/10 Total Project Budget: \$ 2,000,000
 Project Finish Date: 06/30/12 Managing Department: Utilities

This project will meter actual flows coming from each of the cities served by the San Antonio River Authority Salatrillo Wastewater Treatment Plant and provide accurate billings. The project will place the meters in agreed upon locations that will show flow rates and any inflow or infiltration problems coming from the cities and River Authority facilities.

Expenditures	As of			Succeeding	Total
	2010/11	2011/12	2012/13	from 2013/14	
Personnel	\$ -	\$ 20,000	\$ -	\$ -	\$ 20,000
Commodities	-	-	-	-	-
Contracts	-	1,980,000	-	-	1,980,000
Total	\$ -	\$ 2,000,000	\$ -	\$ -	\$ 2,000,000

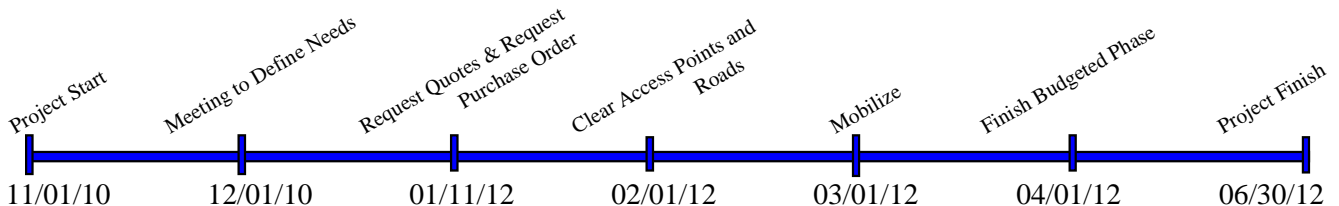
Project Revenues by Funding Source:



\$2,000,000

■ Utilities Fund

Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

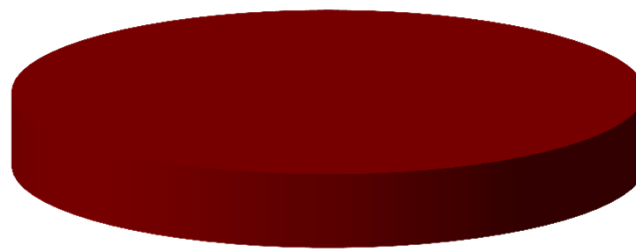
Project Name: Creekwood Water System Improvements **Project #** 00000253

Project Start Date: 07/01/10 Total Project Budget: \$ 58,361
 Project Finish Date: 06/30/13 Managing Department: Utilities

The purpose of this project is to make necessary improvements due to growth in the Creekwood Water System in order to comply with Texas Commission on Environmental Quality drinking water rules. Additional connections to the system could result in increasing the pressure pumping capacity and upsizing of lines in the distribution system.

Expenditures	As of			Succeeding	Total
	2010/11	2011/12	2012/13	from 2013/14	
Personnel	\$ -	\$ 1,000	\$ 4,000	\$ -	\$ 5,000
Commodities	-	7,000	39,361	-	46,361
Contracts	-	2,000	5,000	-	7,000
Total	\$ -	\$ 10,000	\$ 48,361	\$ -	\$ 58,361

Project Revenues by Funding Source:



\$58,361

■ Utilities Fund

Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

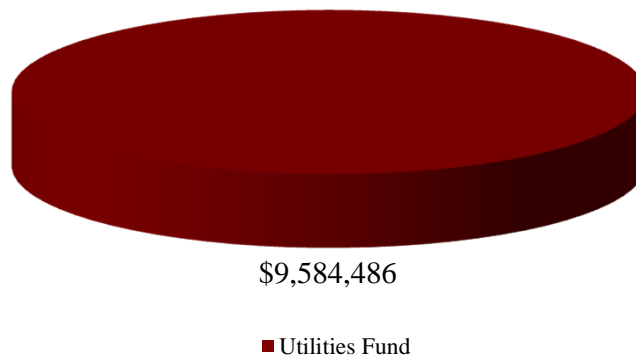
Project Name: Graytown Road Wastewater System Development **Project #** 00000107

Project Start Date: 11/16/06 Total Project Budget: \$ 9,584,486
 Project Finish Date: 06/30/15 Managing Department: Utilities

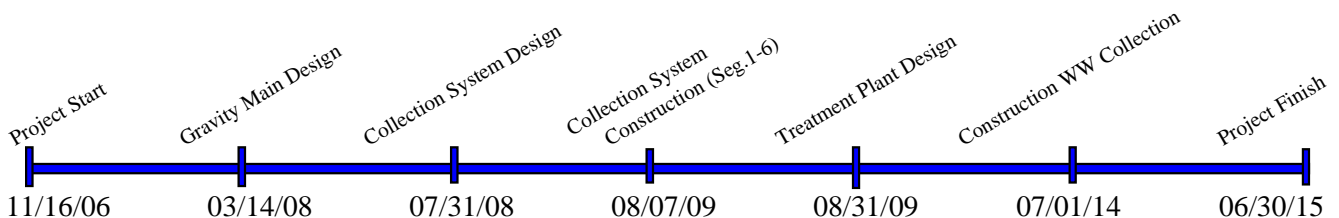
As development in Bexar County expands east, the River Authority continues to receive requests for sewer service in the Martinez III and Graytown Road service areas. The demand has now reached a point that it is advantageous to build a regional treatment plant in the area. With the construction of the Graytown Road Wastewater Treatment Plant, the River Authority has constructed segments 1-6 of the Wastewater Collection system. Segments 11-12 will be constructed during fiscal year 2011/12. This project is a public/private partnership between the River Authority and M4 LTD.

Expenditures	As of			Succeeding from	
	2010/11	2011/12	2012/13	2013/14	Total
Personnel	\$ 542,014	\$ 146,000	\$ 10,000	\$ 20,000	\$ 718,014
Commodities	60,830	2,000	-	-	62,830
Contracts	909,127	266,000	202,000	7,426,515	8,803,642
Total	\$ 1,511,971	\$ 414,000	\$ 212,000	\$ 7,446,515	\$ 9,584,486

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

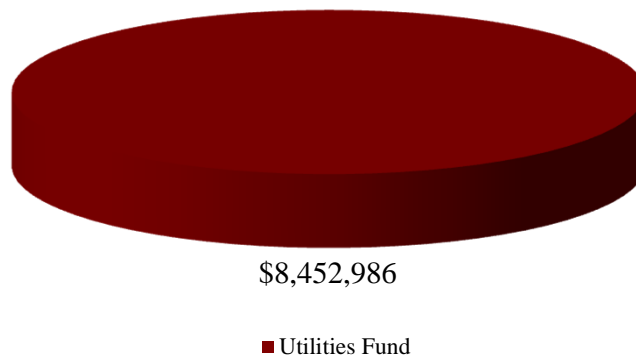
Project Name: **Martinez II WWTP Expansion** **Project #** **00000122**

Project Start Date: 10/02/06 Total Project Budget: \$ 8,452,986
 Project Finish Date: 03/31/12 Managing Department: Engineering

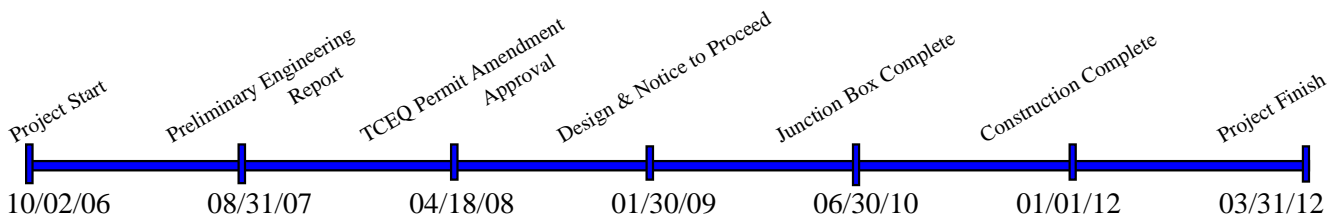
With the continued development in the Upper Martinez and Martinez II service areas, the Martinez II Wastewater Treatment Plant (WWTP) is beginning to reach its current capacity. The Martinez II service area has developed to approximately 65% of its build-out capacity, and the planned expansion should accommodate growth in the area to ultimate build-out. The Martinez II WWTP also receives a significant quantity of wastewater flow through transfer from the Upper Martinez WWTP, which is developed to approximately 73% of its build-out capacity. The 1.5 million gallons per day (MGD) expansion which is currently under construction will accommodate these future flows and maintain flows to a level below 90% of its permitted capacity, or approximately 1.9 MGD at the Upper Martinez WWTP and below 75% of the build-out capacity, or 2.6 MGD, at Martinez II WWTP. The project also funds the design and construction of the Martinez II wastewater sample building (~1000 sq.ft.).

Expenditures	As of			Succeeding	<u>Total</u>
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	
Personnel	\$ 475,000	\$ 100,000	\$ -	\$ -	\$ 575,000
Commodities	26,000	-	-	-	26,000
Contracts	<u>3,250,241</u>	<u>4,601,745</u>	-	-	<u>7,851,986</u>
Total	<u>\$ 3,751,241</u>	<u>\$ 4,701,745</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 8,452,986</u>

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

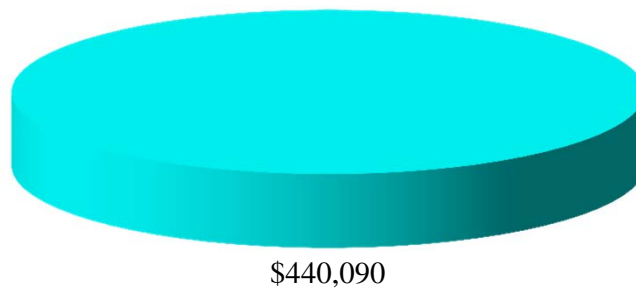
Project Name: Randolph Air Force Base Year 8 (2011) **Project #** 00000255

Project Start Date: 09/01/10 Total Project Budget: \$ 440,090
 Project Finish Date: 10/31/11 Managing Department: Utilities

This project consists of rehabilitating portions of the Randolph Air Force Base (RAFB) sanitary sewer collection system. The project will involve the River Authority hiring a sub contractor to re-assess the sewer line to determine any possible lateral lines and the best type of rehabilitation for this year's scope of work. Also the manholes on this project will be coated.

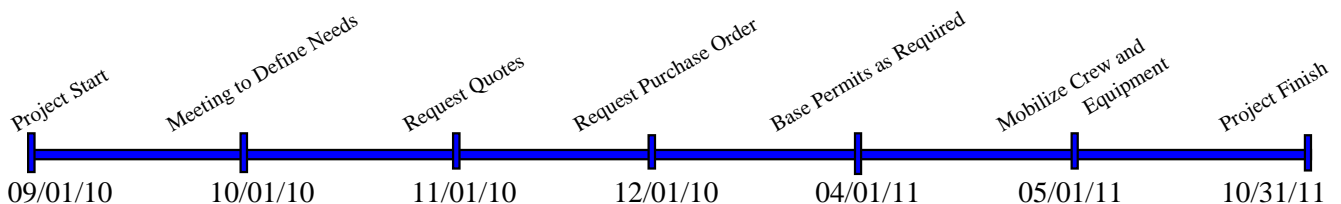
Expenditures	As of				Succeeding from	Total
	2010/11	2011/12	2012/13	2013/14		
Personnel	\$ 10,000	\$ 1,000	\$ -	\$ -	\$ 11,000	
Commodities	-	-	-	-	-	
Contracts	349,090	80,000	-	-	429,090	
Total	\$ 359,090	\$ 81,000	\$ -	\$ -	\$ 440,090	

Project Revenues by Funding Source:



■ Defense Energy Support Center

Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

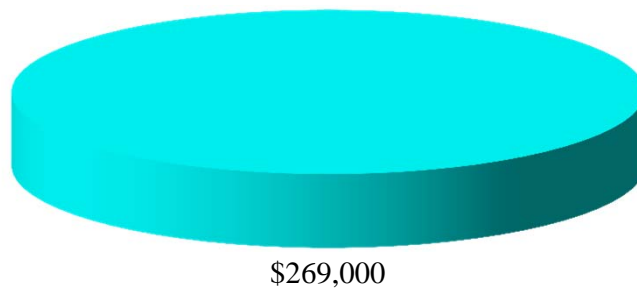
Project Name: Randolph Air Force Base Year 9 (2012) **Project #** 00000290

Project Start Date: 08/01/11 Total Project Budget: \$ 269,000
 Project Finish Date: 06/30/12 Managing Department: Utilities

This project consists of rehabilitating portions of the Randolph Air Force Base (RAFB) collection system that are in great need of rehabilitation based on a 50 year plan. The project will involve the River Authority hiring a sub-contractor to re-assess this sewer line by Closed Circuit Television (CCTV) to determine any possible lateral locations which are in poor condition, as well as determine the best type of rehabilitation. Capital improvement is anticipated for this particular line, and the manholes involved will be coated.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ -	\$ 4,000	\$ -	\$ -	\$ 4,000
Commodities	-	-	-	-	-
Contracts	-	265,000	-	-	265,000
Total	\$ -	\$ 269,000	\$ -	\$ -	\$ 269,000

Project Revenues by Funding Source:



■ Defense Energy Support Center

Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: **Salatrillo Belt Press Replacement** **Project #** **00000288**

Project Start Date: 07/01/11 Total Project Budget: \$ 1,510,000
 Project Finish Date: 06/30/12 Managing Department: Utilities

The purpose of this project is to replace the existing belt press with a higher capacity unit capable of processing solids at the build-out conditions for the Salatrillo Wastewater Treatment Plant. The existing belt press is approximately 18 years old and has exceeded its useful life and is due for replacement. Tasks include evaluation of belt press equipment options, design changes necessary for replacement, and removal of existing and installation of new equipment.

Expenditures	As of			Succeeding	Total
	2010/11	2011/12	2012/13	from 2013/14	
Personnel	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000
Commodities	-	10,000	-	-	10,000
Contracts	-	1,450,000	-	-	1,450,000
Total	\$ -	\$ 1,510,000	\$ -	\$ -	\$ 1,510,000

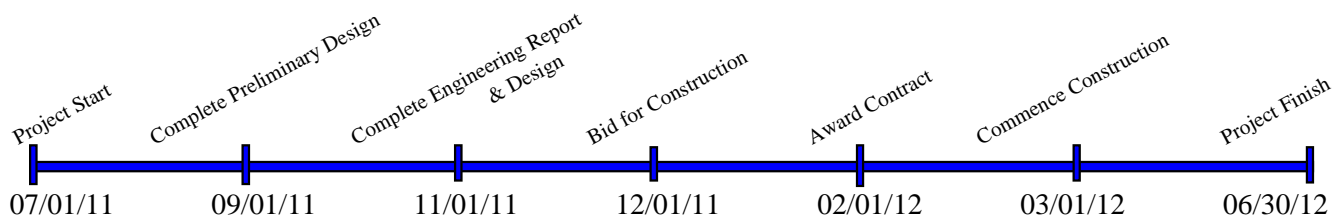
Project Revenues by Funding Source:



\$1,510,000

■ Utilities Fund

Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

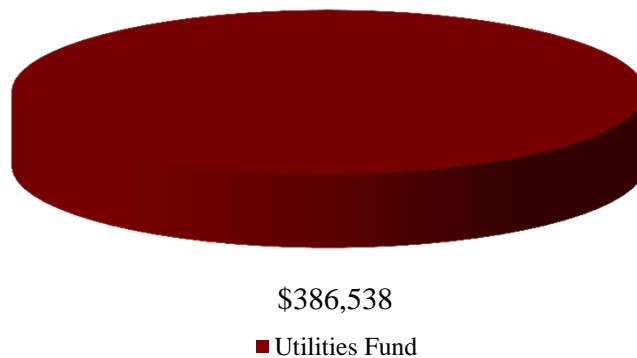
Project Name: Salatrillo Wholesale System I&I **Project #** 00000314

Project Start Date: 05/04/11 Total Project Budget: \$ 386,538
 Project Finish Date: 06/30/12 Managing Department: Utilities

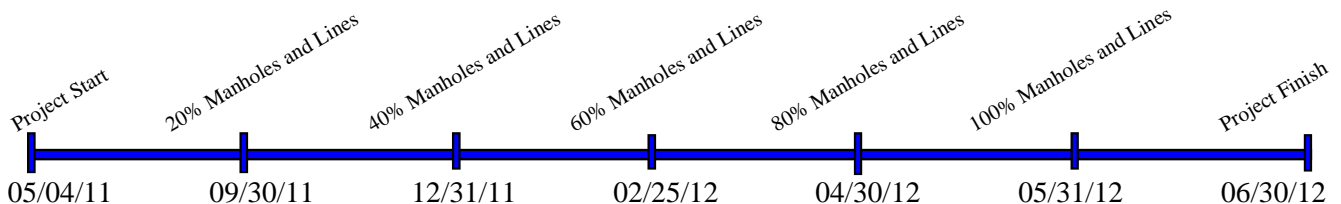
The project will repair defective manholes and defective lines in the Salatrillo Wholesale System according to a 1 to 5 rating, with 5 being the worst condition. Correction of rating 5 lines and manholes will reduce inflow and infiltration (I&I) in identified areas of the system to help reduce or eliminate sanitary sewer overflows. Repairs throughout the whole system will be done over a 10 year period based on Infra Matrix report on assessment of system. This year's project budget funds repairs to 10 percent of the defective system.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -
Commodities	-	-	-	-	-
Contracts	40,000	346,538	-	-	386,538
Total	<u>\$ 40,000</u>	<u>\$ 346,538</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 386,538</u>

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

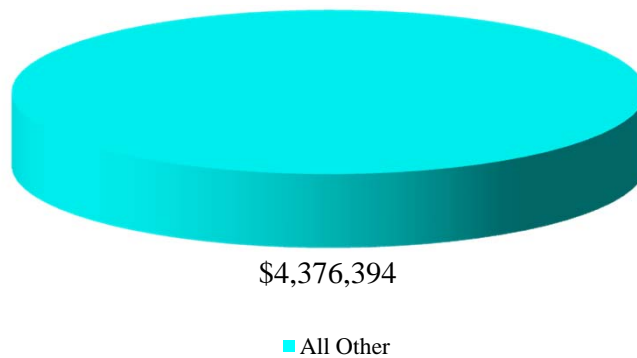
Project Name: Salatrillo Reuse **Project #** 00000228

Project Start Date: 01/22/10 Total Project Budget: \$ 4,376,394
 Project Finish Date: 12/01/12 Managing Department: WRCD

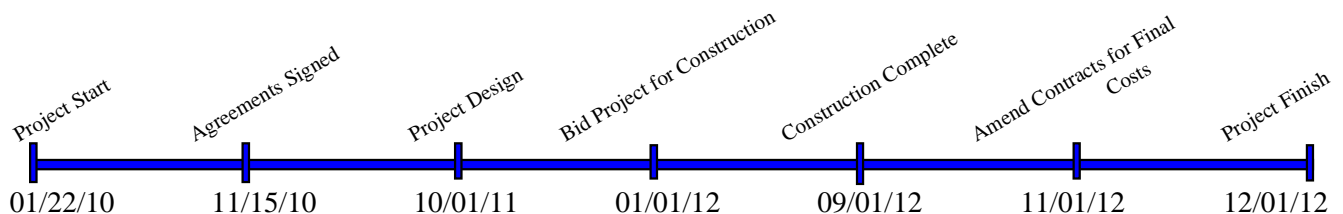
The Salatrillo reuse project will provide the reuse water infrastructure to facilitate Alamo Community College District (ACCD) and Universal City (UC) to use reuse water for irrigation and process water within their facilities. The River Authority will provide the funding and project management for the project, while the two entities will reimburse the River Authority for the capital costs plus provide monies for operations and maintenance of the infrastructure. The project will supply ACCD and UC 222 acre feet of reuse water per year after commissioning the system, but will allow for expansion for future reuse water demands.

Expenditures	As of			Succeeding	Total
	2010/11	2011/12	2012/13	from 2013/14	
Personnel	\$ 108,757	\$ 114,231	\$ 7,000	\$ -	\$ 229,988
Commodities	616	404	-	-	1,020
Contracts	116,038	3,969,348	60,000	-	4,145,386
Total	\$ 225,411	\$ 4,083,983	\$ 67,000	\$ -	\$ 4,376,394

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

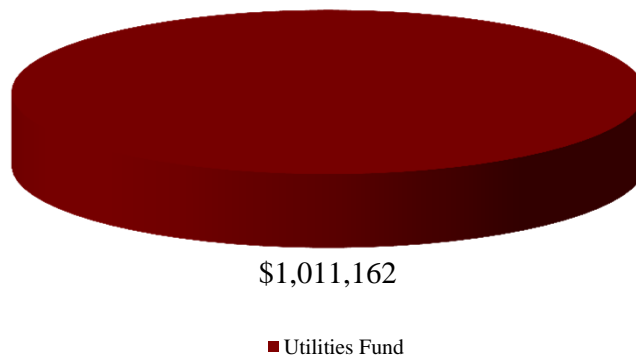
Project Name: SARA Wastewater System I&I **Project #** 00000315

Project Start Date: 05/04/11 Total Project Budget: \$ 1,011,162
 Project Finish Date: 06/30/12 Managing Department: Utilities

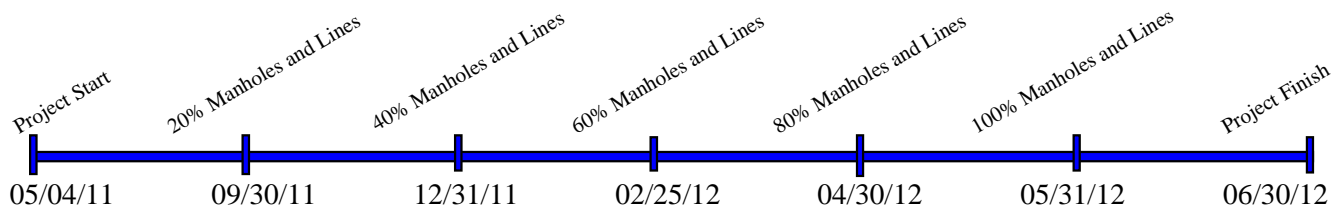
The project will repair defective manholes and defective lines in the SARA Wastewater System according to a 1 to 5 rating, with 5 being in the worst condition. Correction of rating 5 lines and manholes will reduce inflow and infiltration (I&I) in identified areas of the system to help reduce or eliminate sanitary sewer overflows. Repairs throughout the whole system will be done over a 10 year period based on Infra Matrix report on assessment of system. This year's project budget funds repairs to 10 percent of the defective system.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -
Commodities	-	-	-	-	-
Contracts	150,000	861,162	-	-	1,011,162
Total	\$ 150,000	\$ 861,162	\$ -	\$ -	\$ 1,011,162

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

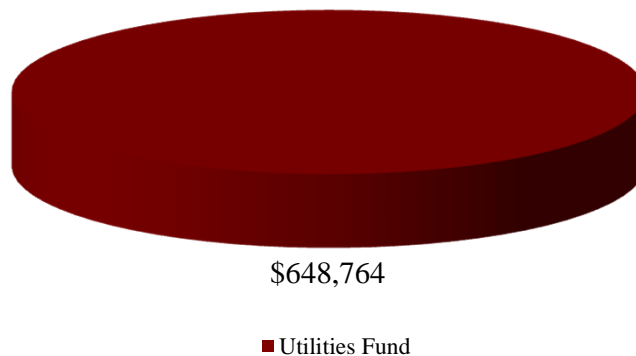
Project Name: **Supervisory Control and Data Acquisition** **Project #** **00000101**

Project Start Date: 04/02/07 Total Project Budget: \$ 648,764
 Project Finish Date: 06/30/12 Managing Department: Utilities

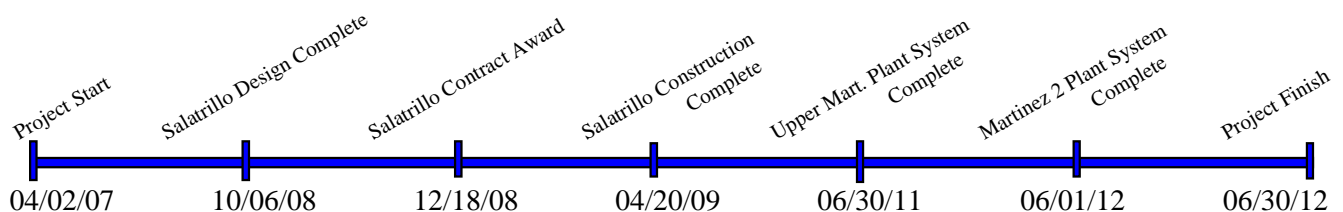
The Supervisory Control And Data Acquisition (SCADA) program will provide communications/controls for all of the River Authority wastewater and water systems from one central computer system. Currently, the River Authority does not have a centralized communication and security control application. This application will help to comply with homeland security within the region; it will also provide a real time monitoring and control system to improve efficiency. The Utilities program will eventually share data with SCADA systems in Watershed Operations, Watershed Management, and Environmental Sciences departments.

Expenditures	As of			Succeeding	Total
	2010/11	2011/12	2012/13	from 2013/14	
Personnel	\$ 30,000	\$ 15,000	\$ -	\$ -	\$ 45,000
Commodities	212,000	1,000	-	-	213,000
Contracts	190,764	200,000	-	-	390,764
Total	\$ 432,764	\$ 216,000	\$ -	\$ -	\$ 648,764

Project Revenues by Funding Source:



Project Milestones



Utilities Program Efforts

- **Community Assistance - Utilities Community Assistance**
To provide water and waste water system assistance to communities within the River Authority four county area.
- **Goliad Water Supply Corporation Operations & Maintenance (O&M) System**
The River Authority operates the water systems for the cities of Fannin and Berclair in Goliad County.
- **Graytown Road Treatment and Collection O&M System**
The Utilities Department currently operates and maintains the Graytown Road wastewater collection system and will operate and maintain the treatment plant once it is constructed.
- **La Vernia Treatment Plant O&M System**
The River Authority operates and maintains the City of La Vernia Wastewater Treatment Plant (WWTP), and the city operates the collection system.
- **Martinez II Treatment and Collection O&M System**
The River Authority's Utilities Department operates and maintains the Martinez II WWTP and collection system.
- **Martinez III Treatment and Collection O&M System**
The purpose of the plant expansion is to provide temporary treatment for connections to be later served by the Graytown WWTP. Once the Martinez III plant reaches 75% capacity or the Graytown Road WWTP is constructed, the Martinez III WWTP will be bypassed to the Graytown Road WWTP. Currently there is a pump and haul operation at this location until the plant receives sufficient flows to place it into operation.
- **Randolph Air Force Base (RAFB) O&M**
Through this effort, River Authority staff operates and maintains the River Authority-owned collection system on the Randolph Air Force Base installation.
- **Salatrillo Retail Collection O&M System**
The River Authority provides retail wastewater services to parts of the City of San Antonio and Bexar County through this effort. This is the collection system portion of the Salatrillo System which the River Authority operates and maintains.
- **Salatrillo Treatment and Collection O&M System**
This effort reflects operation of the Salatrillo Waste Water Treatment Plant and collection system.
- **Salatrillo WW System New Development**
Through this effort, the River Authority provides wastewater services to new developments.
- **Salatrillo WWTP Improvements**
This effort captures continued improvements to the Salatrillo facilities, vehicles and equipment.

- **SARA Wastewater Reuse**
 The River Authority is coordinating with other entities to supply reuse water and alleviate the use of Edwards Aquifer water when possible. The River Authority currently works with the Woodlake Golf Course, the Alamo Community College District, and Universal City to supply reuse water from the Martinez I and Salatrillo systems. As more entities show an interest in using reuse water, the River Authority will make sure there are adequate flows in the streams before agreeing to supply reuse water.
- **SARA Water Treatment and Distribution O&M System**
 This effort provides required facilities, supplies, distribution, and equipment to operate water systems currently consisting of the Creekwood, Seven Oaks, and Mosswood water systems.
- **SARA WW Line Rehab - MPO**
 The River Authority updates and repairs outdated collection system lines in coordination with the Bexar County Metropolitan Planning Organization and TxDOT street improvement projects.
- **SARA WW System Improvements**
 This effort captures continued improvement to the SARA Wastewater System facilities, vehicles and equipment.
- **SARA WW System New Development**
 The River Authority provides wastewater services to new developments within the River Authority's wastewater systems.
- **Somerset Treatment Plant O&M System**
 The River Authority operates and maintains the Somerset Wastewater Treatment Plant and collection system under contract with the City of Somerset.
- **Upper Martinez Treatment and Collection O&M System**
 The River Authority operates and maintains the Upper Martinez Wastewater Treatment Plant and collection system.
- **US Hwy 181 Treatment and Collection O&M System**
 Currently US Hwy 181 Wastewater Plant is serving minimally. Effort is for pumping and hauling the current flow from the plant site to Martinez II Wastewater Treatment Plant for treatment. This also consists of maintaining the collection system.
- **Woodlake Golf Club Reuse O&M System**
 The Utilities Department operates and maintains the distribution system which provides reuse water to the Woodlake Golf Course.

Water Resource Planning and Supply Program

This program oversees projects and efforts that collaboratively assist cities and utilities within the San Antonio River Authority region to plan, develop, and maintain safe, long-term water supplies for communities.

Goliad County Water System Corporation Project
Kenedy Desalination Study Project
South Central Texas Regional Water Planning Group 2016, 4th Cycle Project Efforts

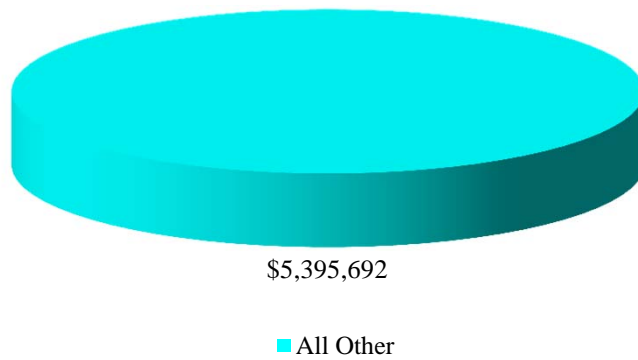
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Goliad County Water Supply Corporation **Project #** 00000135
Project Start Date: 07/01/99 **Total Project Budget:** \$ 5,395,692
Project Finish Date: 06/30/15 **Managing Department:** WRCD

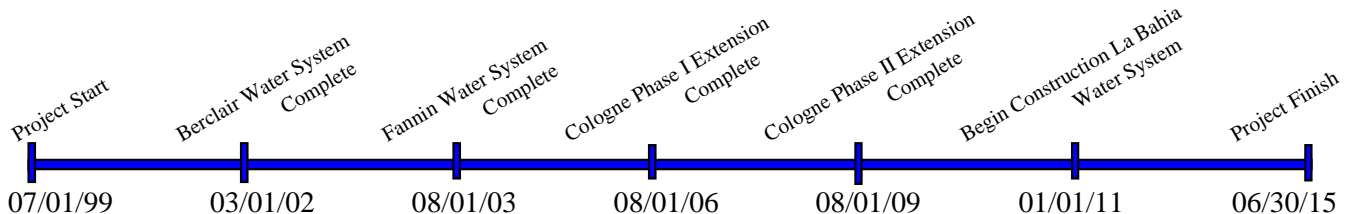
In the fall of 2001, the River Authority contracted with the Goliad County Water Supply Corporation (GCWSC) to assist in the development of two water systems in rural Goliad County. As project manager, one of our initial responsibilities was working with the GCWSC and local community leaders to conduct outreach to property owners. Outreach to solicit a sufficient customer base was a prerequisite to the awarding of grant monies to fund construction. Through its outreach efforts, the River Authority enrolled more customers than the grant required and also served as project manager. In 2007, the Texas Community Development Program awarded a grant to the WSC to extend water to the community of Cologne, and in 2008 the WSC was awarded another grant to complete the extension. The River Authority continues to serve these communities after construction on operations, maintenance, finance and customer service. The Goliad County WSC currently has an application with the United States Department of Agriculture for Rural Development to build water and wastewater systems in Charco, Weesatche, and La Bahia and wastewater systems in Berclair and Fannin.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding <u>from 2013/14</u>	
Personnel	\$ 72,728	\$ 15,058	\$ 10,000	\$ -	\$ 97,786
Commodities	48,691	-	-	-	48,691
Contracts	4,115,361	11,000	1,122,854	-	5,249,215
Total	<u>\$ 4,236,780</u>	<u>\$ 26,058</u>	<u>\$ 1,132,854</u>	<u>\$ -</u>	<u>\$ 5,395,692</u>

Project Revenues by Funding Source:



Project Milestones



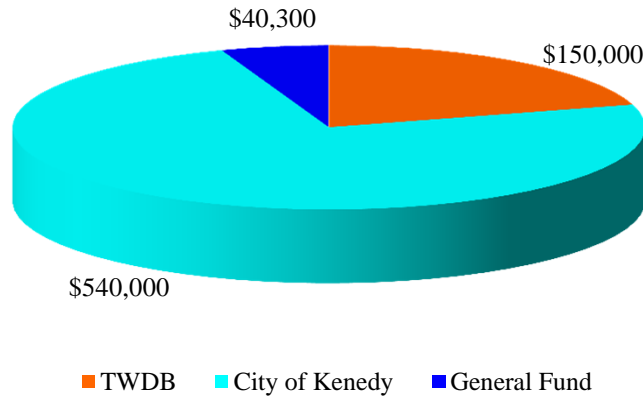
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: **Kenedy Desalination Demonstration** **Project #** **00000005**
 Project Start Date: 01/02/06 **Total Project Budget:** \$ 730,300
 Project Finish Date: 02/01/12 **Managing Department:** WRCD

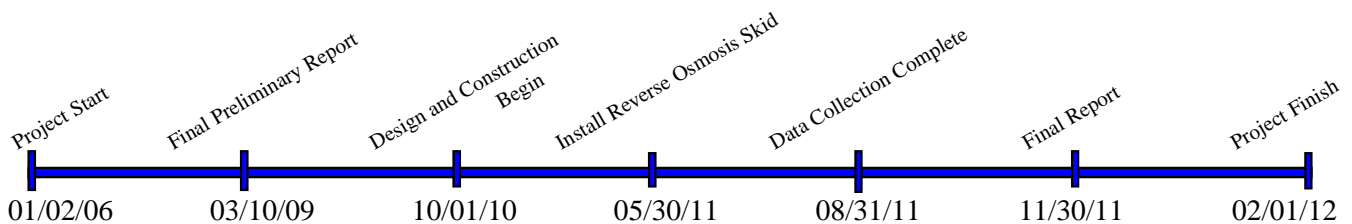
The project will demonstrate the efficiencies gained by utilizing improved Reverse Osmosis (RO) technologies and studying the feasibility of continuing the City of Kenedy's (City) reliance on brackish groundwater to meet projected water needs. The City will demonstrate these efficiencies by replacing membranes, membrane racks, RO controllers, monitoring equipment, pumps, piping, motor controls, and cartridge filters at the City's RO Water Treatment Plant. The replacement of these components, coupled with the City's historic data, will demonstrate the efficiencies gained by utilizing improved RO technologies such as higher overall water recovery rates, higher salt removal, and lower power consumption. Another improvement, and perhaps the most valuable to the City, is increased water production volume and/or quality. In fiscal year 2012, we will finalize the pilot study on each of the membrane trains. The data collected from the new membranes installed will be analyzed and a final report will be submitted to the Texas Water Development Board.

Expenditures	As of			Succeeding	Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>from 2013/14</u>	
Personnel	\$ 36,300	\$ 4,000	\$ -	\$ -	\$ 40,300
Commodities	-	-	-	-	-
Contracts	648,288	41,712	-	-	690,000
Total	\$ 684,588	\$ 45,712	\$ -	\$ -	\$ 730,300

Project Revenues by Funding Source:



Project Milestones



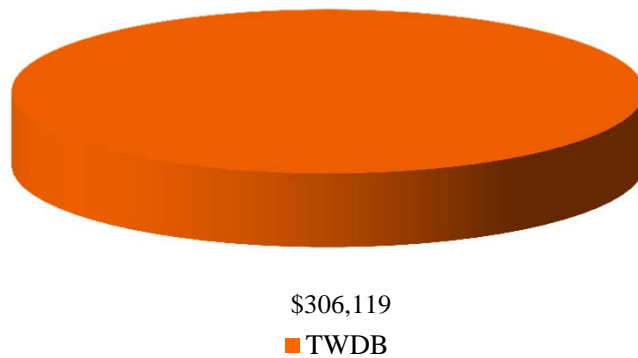
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: SCTRWPG 2016 RWP Fourth Cycle **Project #** 00000291
Project Start Date: 08/01/11 **Total Project Budget:** \$ 306,119
Project Finish Date: 03/01/16 **Managing Department:** WRCD

The South Central Texas Regional Water Planning Group (SCTRWPG) 2016 Region L Texas Water Development Board (TWDB) funding will be used for the development and/or revision of the 2011 Regional Water Plan (RWP). Initial funding for the 2016 RWP will be used to evaluate and provide input on population and population-related water demand projections through 2070; evaluate and provide input on non-population related water demand projections including for irrigation, livestock, mining, steam electric, and manufacturing through 2070; evaluate existing water supplies for water user groups and wholesalers including impacts of recently established Managed Available Groundwater numbers; identify water needs of water user groups and wholesale suppliers; identify potentially feasible water management strategies for evaluation; prepare and submit a Technical Memorandum summarizing activities and data; and subject to the findings in the Technical Memorandum and available funding, begin evaluating potential water management strategies to meet identified water needs.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ -	\$ -	\$ -	\$ -	\$ -
Commodities	-	-	-	-	-
Contracts	-	153,060	153,059	-	306,119
Total	<u>\$ -</u>	<u>\$ 153,060</u>	<u>\$ 153,059</u>	<u>\$ -</u>	<u>\$ 306,119</u>

Project Revenues by Funding Source:



Project Milestones



Water Resource Planning and Supply Program Efforts

- **Regional Water Alliance**

Twenty-one local purveyors and regional water entities work together to promote and facilitate the sharing of ideas, knowledge, experience and resources with the goal of developing collaborative water projects. The purpose of the Regional Water Alliance is to assist participating entities in assessing and developing water supply options to meet the needs of one or more of the participating entities, to promote regional conservation, and to encourage entities to work together to realize region-wide efficiencies and economies of scale in the development, distribution and operation of water projects for the mutual benefit of a diverse customer base.

- **Regional Water Resources Development Group 2011**

This effort is for the administrative services provided by the River Authority to assist in a cooperative purchasing program for acquisition of Edwards Aquifer groundwater withdrawal rights for calendar year 2011.

- **SCTRWPG/Region L CY-2011**

The River Authority serves as Administrator for the South Central Texas Regional Water Planning Group (SCTRWPG). The planning group is working towards developing the 2016 Regional Water Plan. The development of the 2016 regional water plan includes studies, decisions, and recommendations regarding the water supply needs, potential water supply options and strategies throughout the planning area. This effort is funded by an Inter-Local Agreement. Participants are SARA, SAWS, GBRA, Bexar Met, EAA & Nueces River Authority.

- **Surface Water Rights Acquisition**

This effort pursues the acquisition of surface water rights for the benefit of the San Antonio River Authority and its constituents within its jurisdictional boundaries.

Watershed Maintenance and Dam Safety Program

The program oversees projects and efforts involving the floodwater conveyance systems within the San Antonio River Authority jurisdiction. The projects include operations and maintenance, rehabilitation of the San Antonio River Authority dams, and conveyance systems. The goal is to perform these functions in a holistic manner that enhances the riparian environment and the community's appreciation of these natural resources.

Dam Inundation Zone Study Project
Flood Debris Cleanup 2012 Project
Efforts

**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Dam Inundation Zone Study **Project #** 00000292
Project Start Date: 07/01/11 **Total Project Budget:** \$ 50,000
Project Finish Date: 06/30/12 **Managing Department:** Watershed Operations

This project funds a feasibility study related to acquisition of land rights on properties below the San Antonio River Authority's 40 dams where an inundation may occur during a 100 year flood (1% probability). This study will help determine the feasibility of purchasing these inundation zones to decrease the risk to human life.

Expenditures	<u>As of 2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	<u>Total</u>
Personnel	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000
Commodities	-	-	-	-	-
Contracts	-	-	-	-	-
Total	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000

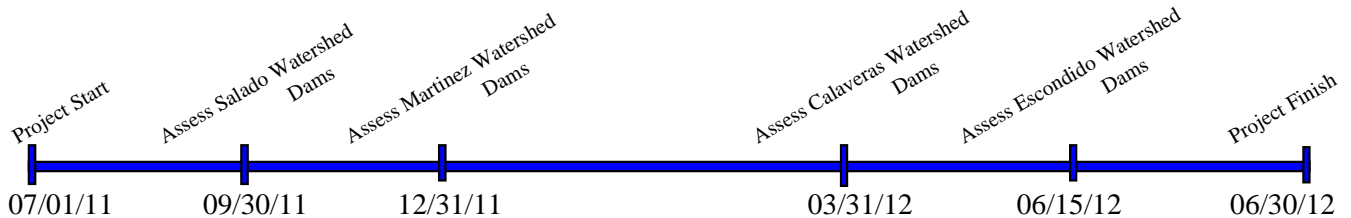
Project Revenues by Funding Source:



\$50,000

■ General Fund

Project Milestones



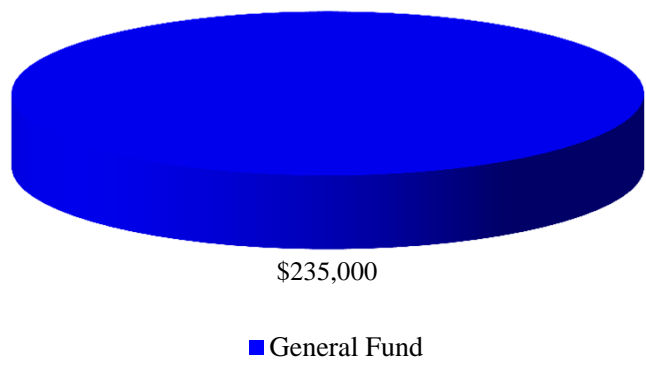
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Flood Debris Cleanup 2012 **Project #** 00000297
Project Start Date: 07/01/11 **Total Project Budget:** \$ 235,000
Project Finish Date: 06/30/12 **Managing Department:** Watershed Operations

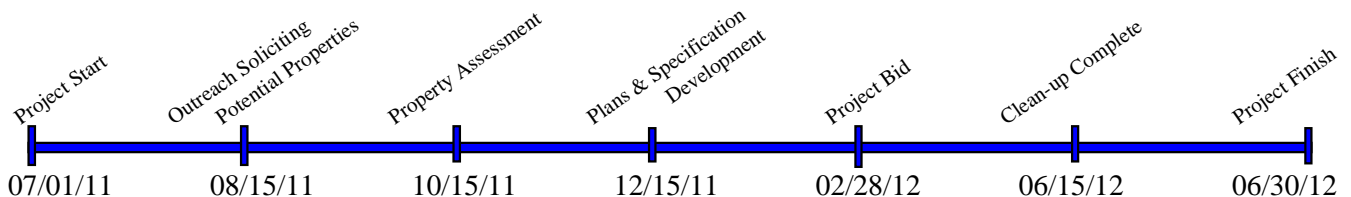
This project will remove flood debris, both man-made and natural, out of the main river channel and immediate banks to reduce flooding and increase flood-water conveyance. Once all potential properties are assessed for program participation, the scores are tabulated and a property or properties will be chosen. The cleanup will be on the San Antonio River or one of its tributaries in one of the River Authority's four-county jurisdictions. Once the property or properties are chosen for cleanup, then plans and specifications will be developed and the project will be bid out. As this project is completed, constituents of the county will benefit from the removal of flood debris which could have impeded flow and caused log jams.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ -	\$ 60,000	\$ -	\$ -	\$ 60,000
Commodities	-	-	-	-	-
Contracts	-	175,000	-	-	175,000
Total	<u>\$ -</u>	<u>\$ 235,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 235,000</u>

Project Revenues by Funding Source:



Project Milestones



Watershed Maintenance and Dam Safety Program Efforts

- **Bexar County Dam Maintenance**

These earthen flood-water detention structures are highly dependent upon a vigorous, dense, vegetative cover for slope stability and the prevention of erosion damage. Many are located on private land under easement. A cooperative program with the landowners has been established for fertilization, weed and brush control and hay harvesting.
- **Channel Maintenance & SACIP Unit 9-1**

This effort consists of standard channel maintenance for the Six Mile, Asylum, and No-Name creeks. This effort also includes the maintenance efforts of SACIP Unit 9-1 (Six Mile Creek).
- **Community Assistance - Debris Assessments & In-House Flood Debris Clean-up**

This effort includes citizen and private property owner involvement in a systematic approach to locate, assess, and prioritize for removal flood debris from selected critical areas along regional waterways within the River Authority's four-county jurisdiction. This waterway cleanup effort has resulted in five to eight miles of waterway conveyance enhancements and three to five tons of man-made debris removal annually.
- **Dam Inspection**

This effort includes annual inspections by Engineering Department and Watershed Operation Department personnel to adhere to state and federal dam safety guidelines, mandates and reporting requirements. On-the-ground visits are made to inspect the structural integrity, to verify the presence of adequate vegetative cover, and to ensure that overall maintenance is meeting regulatory requirements.
- **Dam Monumentation and Signage**

This effort involves the identification of property boundaries and corners at River Authority dam sites in an attempt to limit unauthorized encroachment onto River Authority flood detention easements. Many of these easements are located near developing areas and fall prey to unlawful activities such as dumping.
- **Escondido Creek Maintenance**

This effort consists of maintaining vegetation control to maximize flood water conveyance and to encourage a stable aquatic habitat. The River Authority partners with the City of Kenedy on this effort, which complements other flood conveyance activities within the Escondido Creek Watershed.
- **Karnes County Dam Maintenance**

These earthen flood-water detention structures are highly dependent upon a vigorous, dense vegetative cover for slope stability and the prevention of erosion damage. Many are located on private land under easement. A cooperative program with the landowners has been established for fertilization, weed and brush control and hay harvesting. Partners include the Escondido Watershed District (funding partner) and the Karnes County Soil and Water Conservation District.

- **Mission Reach Maintenance**
 Maintenance activities consist of best management practices for vegetation management, flood channel stability, flood water conveyance and flood debris cleanup. The goal is to encourage a more natural riparian zone within the project right-of-way and promote an ecosystem which allows all native species to flourish yet still provide for maximum flood water conveyance. Maintenance is also performed on hike and bike trails for public outdoor recreation and enjoyment of the San Antonio River.
- **Museum Reach Park Segment**
 Maintenance activities consist of best management practices for vegetation management, flood channel stability, flood water conveyance and flood debris cleanup. The goal is to encourage a more natural riparian zone within the right-of-way and promote an ecosystem and habitat which allow all native species to flourish yet still provide for maximum flood water conveyance. Maintenance is also performed on hike and bike trails for public outdoor recreation.
- **Nichols Creek Maintenance**
 The Nichols Creek Channel Project was completed in 1979 in cooperation with the Natural Resources Conservation Service (NRCS). Current activities consist of maintaining the structural integrity of the concrete riprap-lined channel and beautification amenities. The effort has a funding partnership with the City of Kenedy.
- **SACIP Boundary Monumentation**
 This effort will provide boundary corners to publicly identify the River Authority's property lines on the San Antonio Channel Improvements Project (SACIP) area. The boundary corners will mainly be 5/8" iron rebar 18 inches in length with aluminum caps stamped SAN ANTONIO RIVER AUTHORITY. They will be placed at newly acquired boundary corners and will replace those removed during construction of the River Improvements Project. Work will proactively identify SACIP boundaries in the areas of the Westside Creeks.
- **Urban Segment-Museum Reach Maintenance**
 The San Antonio River Authority has operational and maintenance responsibilities for the Urban Segment of the Museum Reach of the San Antonio River Improvements Project (Lexington Avenue to Grayson Street). Responsibilities include the operation of a lock and dam facility for tourist river barges to be elevated to a water level nine feet higher than the original River Walk. Other amenities and maintenance responsibilities include riverside walkways, a Grotto feature, landscape plantings as well as lighting, benches, water features and an enhanced pedestrian bridge.

Watershed Modeling and Planning Program

This program will oversee, coordinate, and manage projects and efforts within the district on matters of flood modeling, capital project idea development, and mapping of the watershed.

Bexar County Flood Warning and Flood Alert Project
Cooperating Technical Partners (CTP) Development Project
Dam Instrumentation Project
Digital Data Model Repository (D2MR) Project
Edwards Nueces Feasibility Study Project
Environmental Monitoring System Project
San Antonio Bay Ecological Dynamic Simulation (EDYS) Model Development Project
US Geological Survey Coletto Creek Ground Water Surface Water Project
US Geological Survey Paired Watershed Study Project
Wilson Karnes Goliad Floodplain Master Plan Assistance Project
Efforts

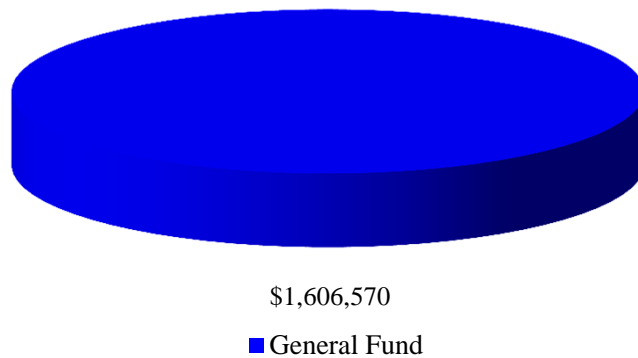
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Bexar County Flood Warning & Flood Alert **Project #** 00000064
Project Start Date: 07/02/07 **Total Project Budget:** \$ 1,606,570
Project Finish Date: 06/30/13 **Managing Department:** Watershed Management

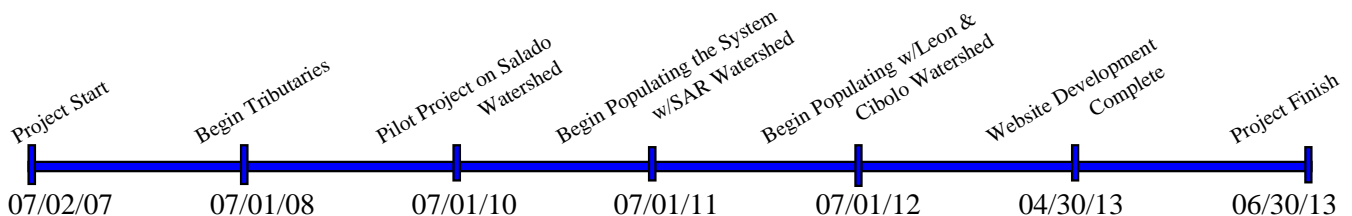
Bexar County Flood Warning System is a project to create a dynamic distributed surface water set of models. The purpose of these models is to simulate and map time-series data of storm events. This system will be housed at the River Authority and potentially hosted to the Emergency Operation Center (EOC) in Bexar County and City of San Antonio via the internet. These models will be taken from the Bexar County DFIRM project and converted to a dynamic system. Due to the basin's terrain and proximity to the Gulf Coast, this system will be unique in that not only will it provide hydro graph as output but will also create inundation maps. This system will be created for use by the EOC. Pilot application of this system is currently being done for the major portion of the Salado Creek Watershed. In the upcoming years additional major watersheds will be added to the system.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ 77,969	\$ 100,000	\$ 20,000	\$ 20,000	\$ 217,969
Commodities	307,935	-	-	-	307,935
Contracts	280,666	100,000	300,000	400,000	1,080,666
Total	\$ 666,570	\$ 200,000	\$ 320,000	\$ 420,000	\$ 1,606,570

Project Revenues by Funding Source:



Project Milestones



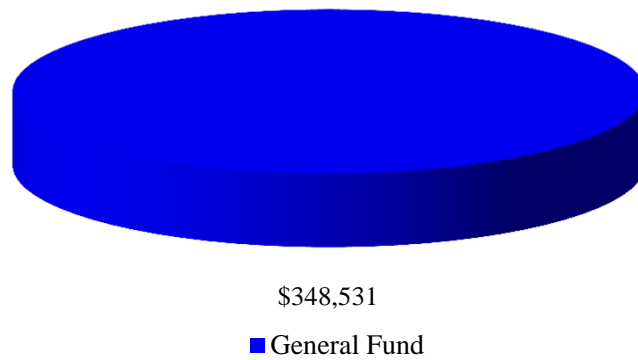
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Cooperating Technical Partnership Development **Project #** 00000092
Project Start Date: 07/01/09 **Total Project Budget:** \$ 348,531
Project Finish Date: 06/30/12 **Managing Department:** Watershed Management

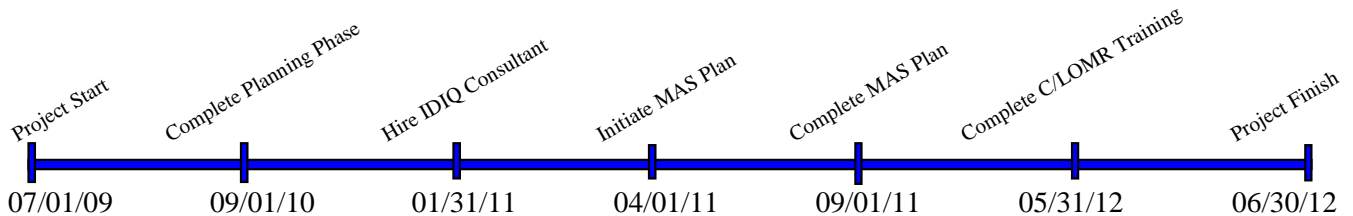
This project will support the River Authority Letter of Map Revision (LOMR) and Conditional Letter of Map Revision (CLOMR) Delegation. This proposed grant will delegate to the River Authority the responsibility of reviewing all the LOMR and CLOMR submittals to the Federal Emergency Management Agency. The technical review of these studies will be done by the River Authority Watershed Management (WSM) staff. This project will secure the DFIRM investment by developing a way to keep the new flood map information up to date and interactive. The project will retain a consultant to help perform Quality Assurance/Quality Control on our LOMR delegation reviews, which require independent review.

Expenditures	As of <u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	<u>Total</u>
Personnel	\$ 12,000	\$ 28,000	\$ -	\$ -	\$ 40,000
Commodities	430	-	-	-	430
Contracts	225,000	83,101	-	-	308,101
Total	<u>\$ 237,430</u>	<u>\$ 111,101</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 348,531</u>

Project Revenues by Funding Source:



Project Milestones



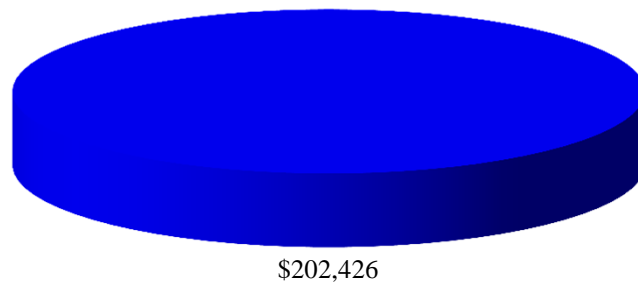
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: **Dam Instrumentation** **Project #** **00000084**
 Project Start Date: 07/02/08 Total Project Budget: \$ 202,426
 Project Finish Date: 06/30/12 Managing Department: Watershed Operations

The project will bring the River Authority’s storm water detention dams into compliance with the updated Texas Commission on Environmental Quality (TCEQ) dam safety regulations. The project scope will include determining water level/rainfall station locations, communications protocol and data concentration pathways. Supervisory Control and Data Acquisition (SCADA) telemetry equipment will support the recording and communication infrastructure. Rain and flood pool stage gauges will ultimately be located at all the River Authority storm water detention dams. Dam instrumentation installation will be completed in fiscal year 2011/12.

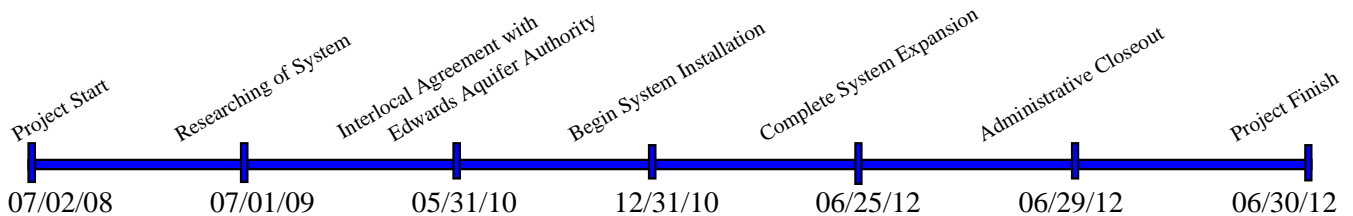
Expenditures	<u>As of 2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	<u>Total</u>
Personnel	\$ 18,000	\$ 3,000	\$ -	\$ -	\$ 21,000
Commodities	122,852	58,574	-	-	181,426
Contracts	-	-	-	-	-
Total	<u>\$ 140,852</u>	<u>\$ 61,574</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 202,426</u>

Project Revenues by Funding Source:



■ General Fund

Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

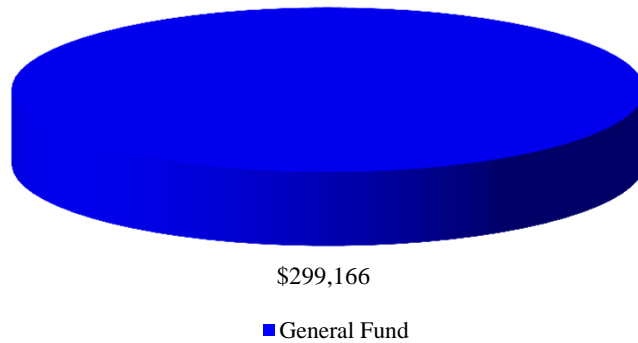
Project Name: Digital Data Modeling Repository (D2MR) **Project #** 00000098

Project Start Date: 08/24/09 Total Project Budget: \$ 299,166
 Project Finish Date: 06/30/12 Managing Department: Watershed Management

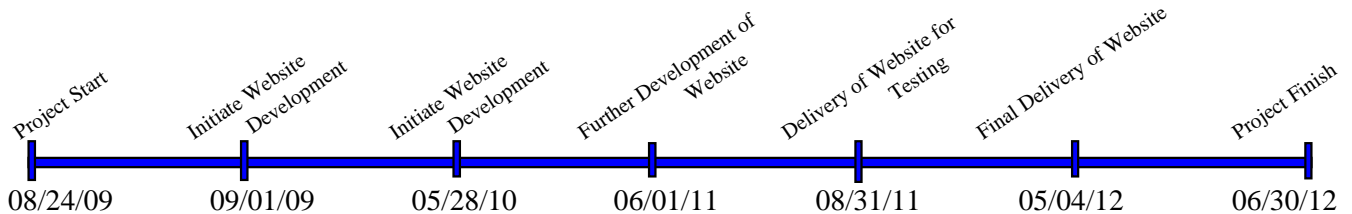
This software application will continue development to host and facilitate the review of hydrological models. The primary goal of this project is to develop a website that supports the Federal Emergency Management Agency (FEMA) Conditional Letter of Map Revision (C/LOMR) process by allowing the engineering community to easily download the required models and supporting data to begin the FEMA C/LOMR process, allowing the engineering community to upload a FEMA C/LOMR study for FEMA review, notify users of overlapping studies based on information provided at the time of a request, and allow for the storage and distribution of the baseline model and all the required models for a C/LOMR in the study area. The final year of this project will focus on distribution and notification processes.

Expenditures	As of			Succeeding from	
	2010/11	2011/12	2012/13	2013/14	Total
Personnel	\$ 4,299	\$ 10,000	\$ -	\$ -	\$ 14,299
Commodities	356	-	-	-	356
Contracts	184,511	100,000	-	-	284,511
Total	\$ 189,166	\$ 110,000	\$ -	\$ -	\$ 299,166

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

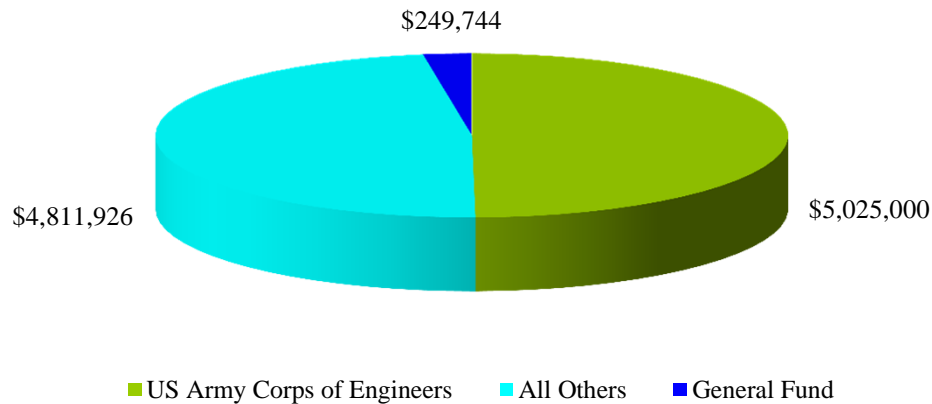
Project Name: Edwards Nueces Feasibility Study **Project #** 00000023

Project Start Date: 03/31/05 Total Project Budget: \$ 10,086,670
 Project Finish Date: 06/30/15 Managing Department: WRCD

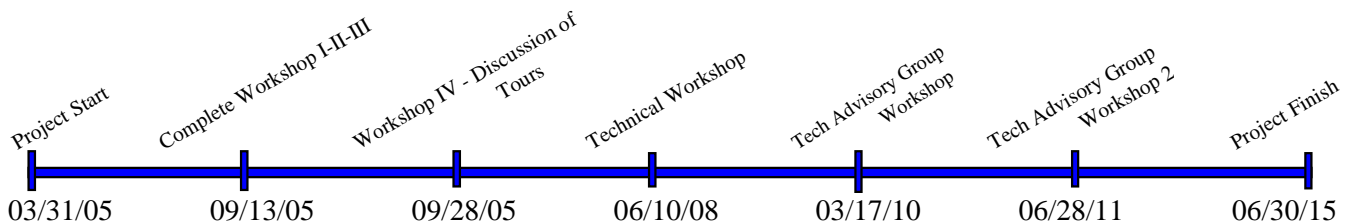
The US Army Corps of Engineers has authorization to conduct a study of opportunities to reduce the recurring flood damages along the Nueces River and its tributaries and other purposes including ecosystem restoration and water supply pursuant to specific appropriation language in the 2002 Conference Report. The River Authority has the need to be involved with possible mitigation for recharge projects, which is a major focus in the feasibility study. The feasibility studies of interest to the River Authority for the Nueces Project include desalination, wastewater diversion to the Nueces Delta, recharge enhancement structures, and brush control projects. In fiscal year 2012, the model updates for the Edwards Aquifer Region will be finalized and completed. Project sponsors anticipate completing the basinwide ecological models and accelerating the development of the Programmatic Environmental Impact Statement to move forward with the feasibility study recommendations.

Expenditures	As of		Succeeding		Total
	2010/11	2011/12	2012/13	from 2013/14	
Personnel	\$ 32,000	\$ 5,000	\$ 2,000	\$ 4,000	\$ 43,000
Commodities	15,200	-	400	400	16,000
Contracts	6,994,101	1,015,069	1,000,000	1,018,500	10,027,670
Total	\$ 7,041,301	\$ 1,020,069	\$ 1,002,400	\$ 1,022,900	\$ 10,086,670

Project Revenues by Funding Source:



Project Milestones



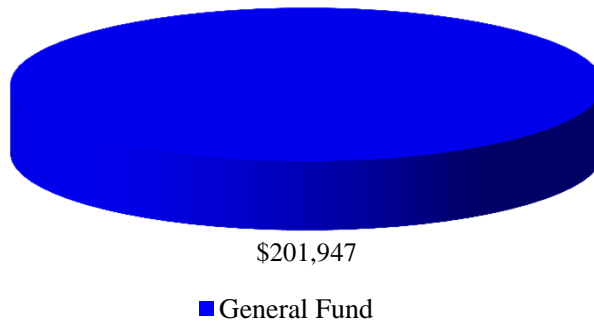
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Environmental Monitoring System **Project #** 00000073
Project Start Date: 03/18/08 **Total Project Budget:** \$ 201,947
Project Finish Date: 06/28/12 **Managing Department:** Watershed Management

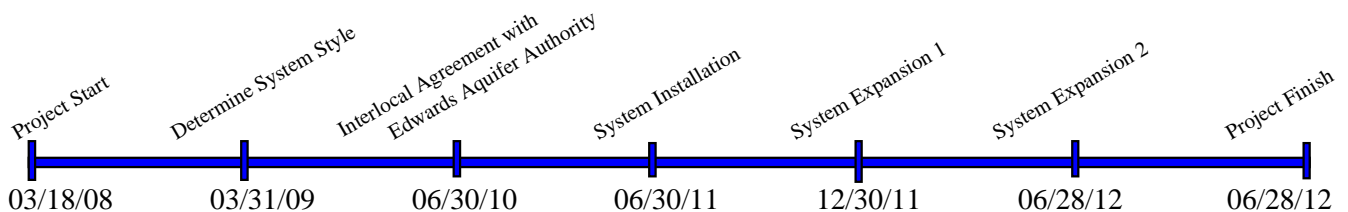
This project will develop and install a rain gauge network that provides adequate coverage in the five major watersheds to support the Bexar County Flood Warning Project. Gauge locations can be coordinated with the Environmental Sciences Department to provide vehicle for water quality data at sites of interest as well. Coordination between existing monitoring systems of the City of San Antonio and the Edwards Aquifer Authority will be conducted to maximize data collection in Bexar County. Future expansion into Wilson, Karnes, and Goliad counties is planned. Funding for the fiscal year of 2011/12 will be used to purchase gauge network components. Installation of equipment in Bexar County is a cooperative effort between the San Antonio River Authority and the Edwards Aquifer Authority.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding from <u>2013/14</u>	
Personnel	\$ 20,302	\$ 20,000	\$ -	\$ -	\$ 40,302
Commodities	89,112	72,375	-	-	161,487
Contracts	158	-	-	-	158
Total	<u>\$ 109,572</u>	<u>\$ 92,375</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 201,947</u>

Project Revenues by Funding Source:



Project Milestones



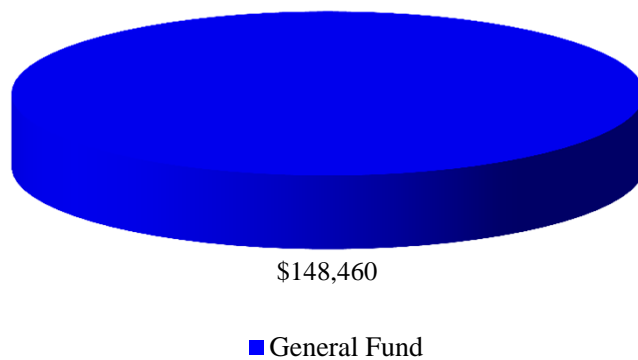
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: SA Bay EDYS Model Development **Project #** 00000296
Project Start Date: 02/01/11 **Total Project Budget:** \$ 148,460
Project Finish Date: 06/30/12 **Managing Department:** Environmental Sciences

The purpose of this Ecological Dynamic Simulation (EDYS) application is to develop the first phase of an integrated model for San Antonio Bay. The model will combine multiple parameters and simulate salinity and sediment gradient dynamics resulting from outflows of freshwater from the river and tidal inputs of brackish water from the bay and the effects of these gradients on the marsh vegetation, primarily cordgrass species.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding <u>from</u> <u>2013/14</u>	
Personnel	\$ 1,000	\$ 9,000	\$ -	\$ -	\$ 10,000
Commodities	-	-	-	-	-
Contracts	25,000	113,460	-	-	138,460
Total	<u>\$ 26,000</u>	<u>\$ 122,460</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 148,460</u>

Project Revenues by Funding Source:



Project Milestones



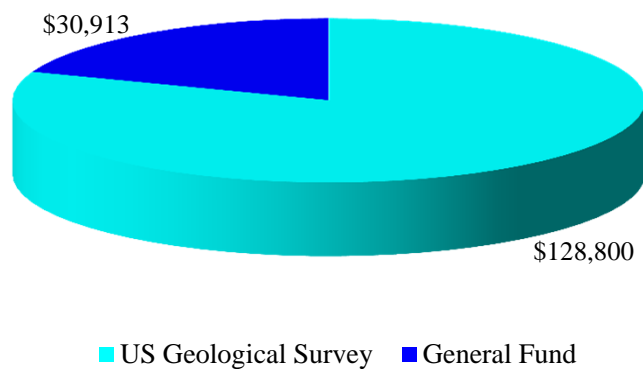
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: USGS Coledo Creek Groundwater Surface Water **Project #** 00000015
Project Start Date: 02/11/09 **Total Project Budget:** \$ 159,713
Project Finish Date: 12/31/11 **Managing Department:** WRCD

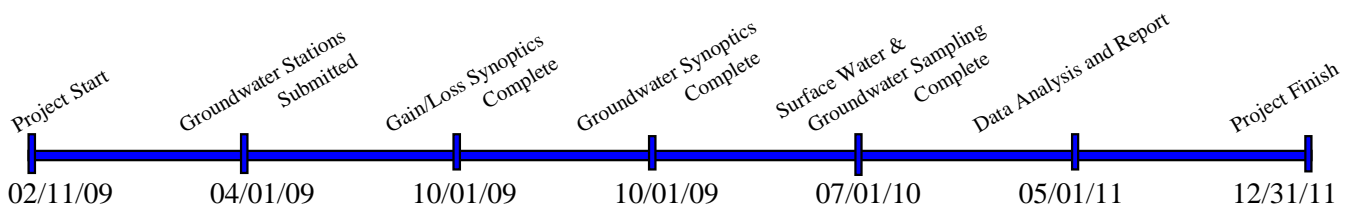
The study will enhance scientific understanding of the hydrology of the study area. The objective is to characterize the surface water and groundwater in the upper section of the Coledo Creek watershed. U.S. Geological Survey (USGS) will perform a thorough examination of the hydrology and groundwater recharge/discharge in the upper section of the Coledo Creek watershed to support water management decisions that will help ensure protection of the Evangeline Aquifer and surface water resources in the study area. Acquiring a good understanding of the hydrologic system will provide critical baseline information. In fiscal year 2012, the report will be finalized and published by the USGS. The Lower San Antonio River Groundwater/Surface water Hydrological Simulation Program-Fortran model will be updated with the data collected from the study. The River Authority will also maintain copies of the data collected for the study.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding <u>from</u> <u>2013/14</u>	
Personnel	\$ 3,625	\$ -	\$ -	\$ -	\$ 3,625
Commodities	-	-	-	-	-
Contracts	154,288	1,800	-	-	156,088
Total	<u>\$ 157,913</u>	<u>\$ 1,800</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 159,713</u>

Project Revenues by Funding Source:



Project Milestones



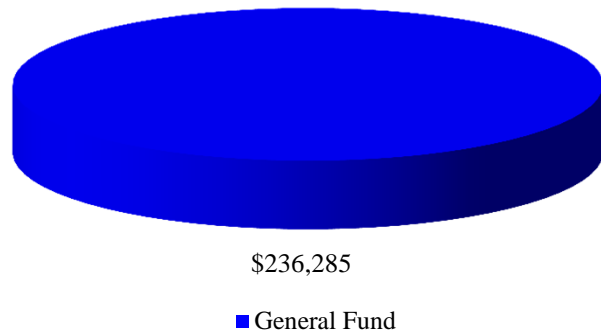
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: USGS Paired Watershed Study **Project #** 00000016
Project Start Date: 01/01/01 **Total Project Budget:** \$ 236,285
Project Finish Date: 10/01/15 **Managing Department:** WRCD

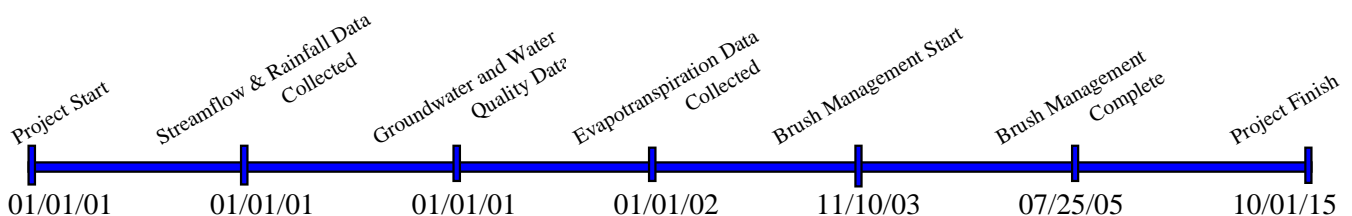
A paired-watershed study design will be used to quantify differences in the quantity and quality of stream flow and spring flow between the control and treatment watersheds from implementation of brush management best management practices. Study locations are the Honey Creek State Natural Area (HCSNA) in Comal County and the Government Canyon State Natural Area in Bexar County. Cooperating Partners include Texas Parks and Wildlife Department, Natural Resources Conservation Service, U.S. Geological Survey, Edwards Aquifer Authority, Guadalupe-Blanco River Authority, and Edwards Region Grazing Lands Conservation Initiative. In fiscal year 2012, we will begin Phase II of the study. The objective of the second phase is to quantify the effects of a prescribed burn on the hydrologic budget. Activities will include operation and maintenance (O&M) of the two meteorological stations, the three streamflow gages, water quality samples, and the rainfall gage network at HCSNA. The results will be utilized to assess an empirical model to estimate evapotranspiration rates at the Honey Creek State Natural Area.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ 3,392	\$ 4,800	\$ 2,500	\$ 5,000	\$ 15,692
Commodities	134	-	300	100	534
Contracts	<u>175,059</u>	<u>15,000</u>	<u>15,000</u>	<u>15,000</u>	<u>220,059</u>
Total	<u>\$ 178,585</u>	<u>\$ 19,800</u>	<u>\$ 17,800</u>	<u>\$ 20,100</u>	<u>\$ 236,285</u>

Project Revenues by Funding Source:



Project Milestones



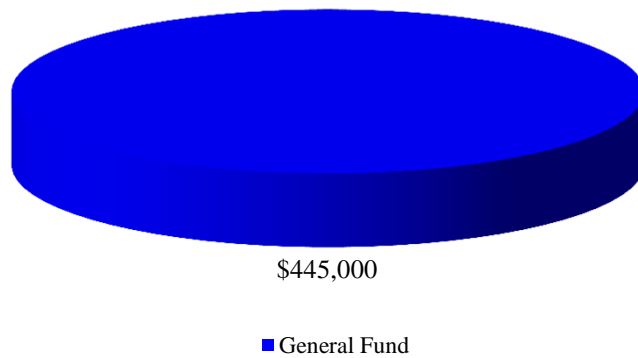
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: **WKG Floodplain Master Plan Assistance** **Project #** **00000076**
 Project Start Date: 07/01/08 Total Project Budget: \$ 445,000
 Project Finish Date: 06/30/12 Managing Department: WRCD

This project will provide technical assistance to the Wilson, Karnes, and Goliad communities. The technical assistance will include watershed master planning activities that focus on flood control. The project will also assist those communities in their efforts to apply for and secure Federal Emergency Management Agency (FEMA) and Texas Water Development Board (TWDB) grants for flood protection planning and construction of flood control construction improvement projects (CIPs). The activities of this project include identification of major flooding reaches and potential flood control CIPs (e.g. Natural water way conveyance, regional storm water detention facilities, storm sewer improvements). The project will also identify opportunities for non-structural flood control strategies such as property buyouts, riparian buffers, land use and development recommendations, and low impact development.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ 15,000	\$ 30,000	\$ -	\$ -	\$ 45,000
Commodities	-	-	-	-	-
Contracts	200,000	200,000	-	-	400,000
Total	<u>\$ 215,000</u>	<u>\$ 230,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 445,000</u>

Project Revenues by Funding Source:



Project Milestones



Watershed Modeling and Planning Program Efforts

- **Bexar Regional Watershed Management (BRWM)**

This effort includes any technical assistance needed by the cities and the county involved in the Bexar Regional Watershed Management program's interlocal agreement. Work may include analysis, recommendation and review of Capital Improvement Program projects, flood issues and mitigation solutions.
- **Cibolo Creek Feasibility Study - COE**

The Cibolo Creek Feasibility study is a US Army Corps of Engineers (COE) study that is looking at the feasibility of mitigating flooding on the upper Cibolo Creek from Boerne Lake to southeast Bexar County, IH-10. Study options include the possibility of developing flood control structures that will also help recharge the Edwards Aquifer. Partners to this study include the Guadalupe-Blanco River Authority, San Antonio Water System, the Edwards Aquifer Authority, San Antonio River Authority and the US Army Corps of Engineers.
- **Contour Production for BC**

This effort will purchase, review and provide quality assurance/quality control (QA/QC) updated contours dataset for Bexar County.
- **Downstream Flood Warning and Response System**

This effort (previously a project) will maintain and update the HEC-FWRS (Hydrologic Engineering Center - Flood Warning and Response System).
- **Emergent GIS Data Acquisition and Support**

This effort aims to provide emergency GIS support and data acquisition should the region be impacted by a sever disaster. The purpose of this effort is not to fund an entire acquisition or to provide all GIS support/services but to collaborate with regional communities to acquire data and/or fund additional GIS support as needed. Data acquisition may include, but is not limited to, obtaining aerial imagery and topography. In the event of a major flood, imagery and topography could provide a more comprehensive view of impacted areas. GIS support could include mass map production to support emergency operations or help to fund specialized GIS services.
- **Leon Creek Feasibility Study – USACE**

The Leon Creek Feasibility Study is a US Army Corps of Engineers (USACE) study that is looking at the feasibility of flood risk mitigation and ecosystem restoration on the Leon Creek Watershed within Bexar County. This effort is a complementary study to the Leon Creek Master Plan project. The outcome of this study will define the USACE financial and federal interest in participating in the development of the identified mitigation projects.
- **Major Flood Event Imagery**

This effort will purchase, review and perform QA/QC on any flood event imagery which will provide modelers with data to calibrate against.

- **San Antonio River Basin Monitoring Network - Stream Gauges**
The River Authority administers this effort to monitor normal conditions of receiving streams and to collect data to document long-term trends in water quality. The goal is to develop a Real Time Monitoring (RTM) system that traces the continuity of water quality from ground water through spring emergencies, through the San Antonio Metropolitan area, and includes tributaries that contribute flow to the San Antonio River as it flows to the coast. Possible future site locations for RTM stations include Salado Creek, Leon Creek, the San Antonio River, and possibly San Antonio Bay.
- **San Antonio River Authority LOMR Delegation**
This is an effort to have the River Authority receive the task from the Federal Emergency Management Agency (FEMA) to review Letter of Map Revision (LOMR) for FEMA in the region.
- **Tributary Modeling Project**
The Digital Flood Insurance Rate Map (DFIRM) effort in Bexar, Wilson, Karnes, and Goliad counties generated detailed computer models of the primary and some secondary rivers/streams within the San Antonio River Basin. The models were used to estimate and map the 1% annual chance flood event, commonly referred to as the 100-year flood. Although over 1,000 stream miles were modeled under that effort, many streams were not modeled and therefore do not have FEMA DFIRM floodplains developed for those streams. The purpose of this effort (previously a project) is to create limited detail floodplain models for the unstudied streams to serve as base models for developing Zone A floodplain boundaries for the unmapped areas and serve as the basis for more detailed studies as needed. These new models will also be integrated into the River Authority's flood monitoring/response efforts as they become available.

Stand Alone Projects & Efforts

Arc Geographical Information System Server Implementation Project
Historical Geographical Information System Database Project
Real Estate and Planning Geographical Information System Support Project
Wastewater Billing and Geographical Information System Assessment Project
Efforts

**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

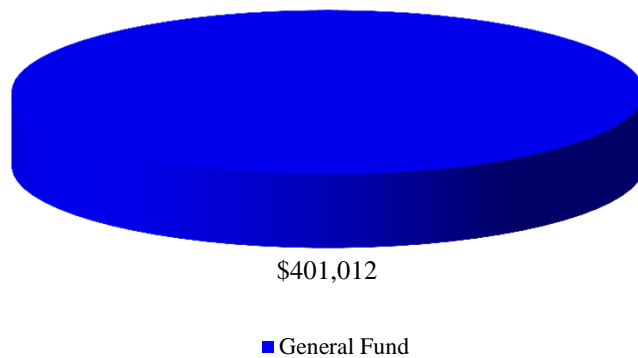
Project Name: ArcGIS Server Implementation **Project #** 00000077

Project Start Date: 07/01/08 Total Project Budget: \$ 401,012
 Project Finish Date: 06/30/13 Managing Department: Watershed Management

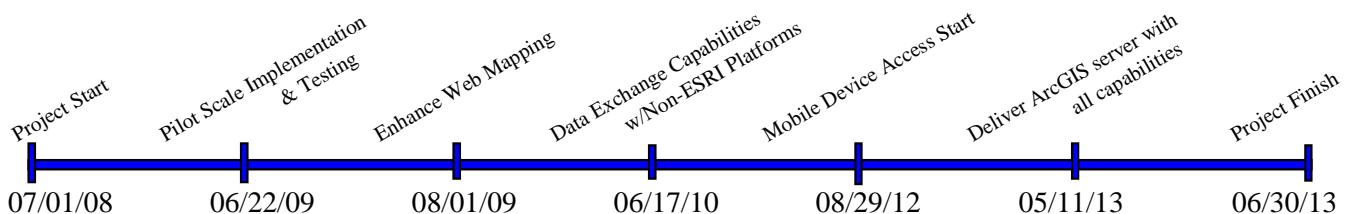
This project is implementing the ArcGIS Server technology SARA-wide to enable data replication with area organizations, mobile device access, enhanced web mapping and data exchange capabilities with other GIS platforms. The pilot scale project implementation was accomplished on data replication which enabled exchanging real-time/live GIS data with consultants during DFIRM. Map templates were generated to make the mapping easier for SARA personnel, ArcGIS-Server websites were enhanced with updated interface; and functionalities, such as address search and pilot scale website development geared towards mobile platforms (iPhone, iPod, and others), were accomplished. The project will continue with the addition and enhancement of mobile mapping/data access, updated web interface and functionalities, virtualization of the system to save hardware/software resources, implementation of real-time data exchange capabilities with area organizations, and integration with other web mapping platforms (Google Earth, Bing Maps, etc.) to provide user friendly, robust and improved application in the full-scale implementation.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ 170,750	\$ 35,000	\$ 40,000	\$ -	\$ 245,750
Commodities	85,000	-	-	-	85,000
Contracts	70,262	-	-	-	70,262
Total	\$ 326,012	\$ 35,000	\$ 40,000	\$ -	\$ 401,012

Project Revenues by Funding Source:



Project Milestones



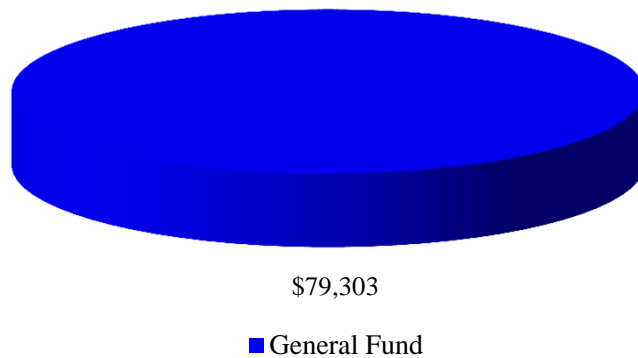
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Historical GIS Database **Project #** 00000010
Project Start Date: 07/01/09 **Total Project Budget:** \$ 79,303
Project Finish Date: 06/30/12 **Managing Department:** Engineering

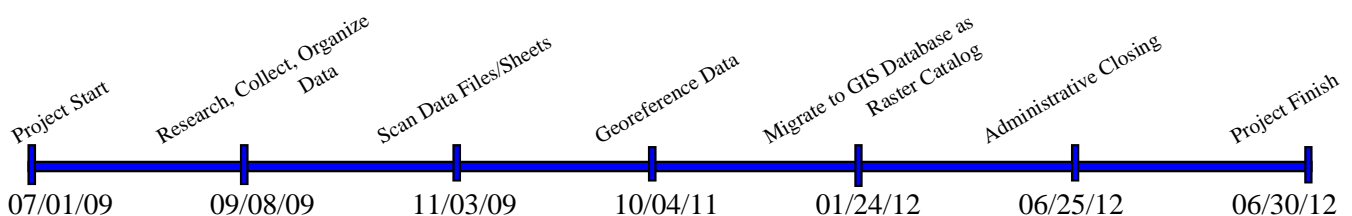
The Engineering Department is generating a Geographical Informational System (GIS) database for historical maps which is composed of 1) City of San Antonio plat book (900 maps, 1968); 2) City block maps (200 maps, Ferguson mapping); and 3) the River Authority right-of-way maps, all creeks and rivers. Items 1 and 2 are the best historical sources to aid in the reconstruction of the tracts that existed during the time of the rechanneling of the river. The old deeds call for the street names as they existed at that time; therefore these two items serve as the best references and would provide the best legal basis for the layout to define our boundaries.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>Succeeding from 2013/14</u>	
Personnel	\$ 22,867	\$ 52,000	\$ -	\$ -	\$ 74,867
Commodities	189	-	-	-	189
Contracts	1,253	2,994	-	-	4,247
Total	<u>\$ 24,309</u>	<u>\$ 54,994</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 79,303</u>

Project Revenues by Funding Source:



Project Milestones



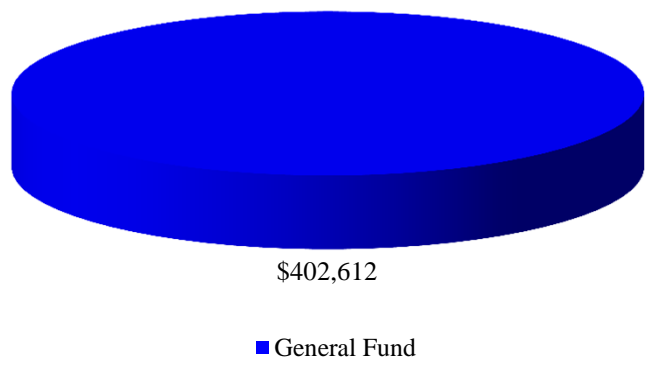
**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

Project Name: Real Estate GIS Support **Project #** 00000004
Project Start Date: 05/01/03 **Total Project Budget:** \$ 402,612
Project Finish Date: 12/31/11 **Managing Department:** Real Estate

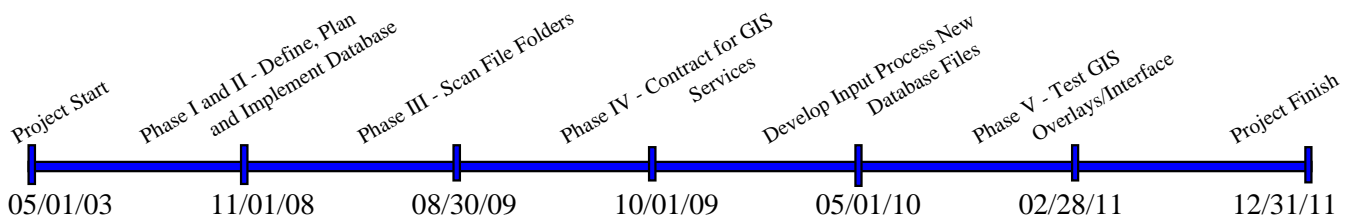
This project funds the Real Estate Department’s development of a centralized database for use within the overall River Authority Geographical Information System (GIS) database. Currently no organized database exists to collect Real Estate data for a centralized GIS system. This project has gathered, documented and organized all available River Authority Real Estate data in a single database that incorporates a user friendly graphic interface to utilize the existing PaperVision software. This project is scheduled for completion in December 2011 at which time Real Estate staff will begin the operation and maintenance portion of the project.

Expenditures	As of				Total
	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	Succeeding <u>from</u> <u>2013/14</u>	
Personnel	\$ 226,000	\$ 25,000	\$ -	\$ -	\$ 251,000
Commodities	148	-	-	-	148
Contracts	101,464	50,000	-	-	151,464
Total	<u>\$ 327,612</u>	<u>\$ 75,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 402,612</u>

Project Revenues by Funding Source:



Project Milestones



**SAN ANTONIO RIVER AUTHORITY
PROJECT BUDGET
2011/12**

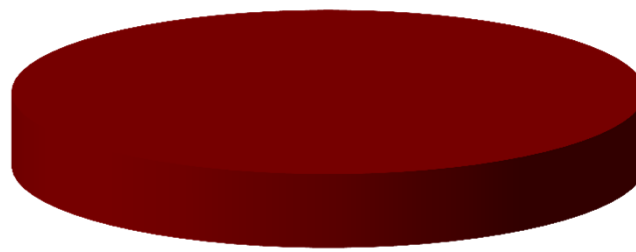
Project Name: Wastewater Billing and GIS Assessment **Project #** 00000102

Project Start Date: 01/01/09 Total Project Budget: \$ 1,810,344
 Project Finish Date: 06/30/12 Managing Department: Utilities

Working with a consultant, this project will provide Geographical Information System (GIS) services, analysis of billing and collection services, analysis of business practices, and make recommendations. A limited purpose audit was conducted that covered the periods of July 2005 to October 2009. Based on the consultant's recommendations, we will develop solutions on billing processes and reports, evaluate the billing system, contract with single provider, or perform in-house billing. The River Authority will finalize an agreement with San Antonio Water System, if it is decided that they will perform billing rather than BexarMet.

Expenditures	As of				Total
	2010/11	2011/12	2012/13	Succeeding from 2013/14	
Personnel	\$ 18,000	\$ 15,000	\$ -	\$ -	\$ 33,000
Commodities	-	-	-	-	-
Contracts	1,520,000	257,344	-	-	1,777,344
Total	\$ 1,538,000	\$ 272,344	\$ -	\$ -	\$ 1,810,344

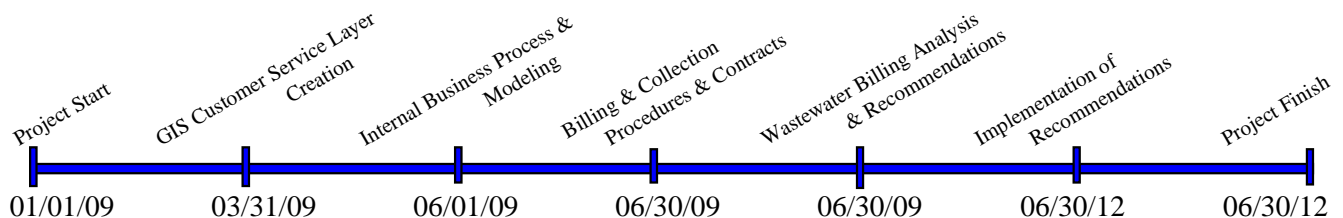
Project Revenues by Funding Source:



\$1,810,344

■ Utilities Fund

Project Milestones



Stand Alone Efforts

- **Downstream GIS Support**

Currently, Wilson, Karnes, and Goliad counties do not have a Geographical Information System (GIS) implementation. Therefore, the counties cannot readily distribute geospatial data to the public. This project will make the GIS tools accessible to all downstream counties. Using the ArcServer platform, we will be able to make GIS tool available to the downstream communities to create geospatial data in areas where GIS is not used currently. This application is web/internet based, so no additional software will be needed for the downstream counties. The River Authority will house and maintain the counties' web presence and data. This application will also allow for a public accessible website, so citizens in the counties will be able to view the GIS data. Training on using the applications and general GIS concepts will be provided to the county staff. By providing GIS capabilities to our downstream counties, the River Authority staff will have a holistic application of GIS data in our basin.

- **Fleet Maintenance and Management**

This ongoing effort provides the necessary asset management to keep our fleet of vehicles in proper working condition. By keeping the fleet maintained, we reduce the costs associated with capital outlay necessary to make major repairs or replace vehicles.

- **Geoportal Implementation**

This will enable discovery of and access to Enterprise GIS (EGIS) data, applications and services for all the River Authority and act as a catalog. The Geoportal will also enable the River Authority's EGIS to link with other entities and the national spatial data infrastructure network (NSDI). The Geoportal will support sharing of geographic information and will help the River Authority avoid duplicated efforts, inconsistencies, delays, confusion and wasted resources through access to data and services, and will enhance coordination and communication.

- **GIS Server Virtualization**

This project will virtualize all servers related to the River Authority's EGIS. Server virtualization for EGIS will allow optimized use of hardware resources in the long run by generating virtual server machines on multiple pieces of hardware. It will start with pilot scale (2 servers) implementation and continue until we have all GIS servers virtualized and will rely on provision of IT resources for the effort such as VMWare and other software.

- **GIS Support**

GIS Support Effort will include map production, analysis and other support work/tasks done internally and externally.

Internal:

- Department (each department will have its own code)
- Board/Executive support (an account for special tasks requested by executives and board members will be established)

External:

- General GIS and mapping support (public map/data and other GIS related requests).

- **Green Initiative**
 The Green Initiative is an employee-driven effort established in response to River Authority staff who have voiced a desire for the River Authority to consider the environmental impact of all the River Authority operations, allow River Authority staff at all levels to play an active role in making “green” recommendations, minimize our impact on natural resources, minimize waste, and enhance recycling. This effort supports the River Authority’s mission to protect and preserve the water resources within the San Antonio River Basin and its environmental mission to be the basin-wide leader in developing and maintaining a healthy and sustainable watershed.
- **Image Server Implementation**
 This project will enable integration of LIDAR, NEXRAD and other remote sensing data with the EGIS platform for real-time imagery data serving and processing. It will allow users to process and serve large volumes of geospatial imagery quickly and seamlessly. It will simplify image management by allowing users to directly publish large image collections without pre-processing; will dynamically piece together images in different projections, formats, locations, and pixel sizes; and will be fast due to server-based processing for the generation of multiple image products from a single source on the fly. It will also provide important service and image level metadata and will enable effortless distribution by serving very large volumes and numbers of imagery to a large range of client applications.
- **Imagery Acquisition for Bexar County**
 This effort will fund River Authority participation in the imagery data acquisition in partnering with Bexar metro 911, Bexar Appraisal and the City of San Antonio.
- **Property Management**
 The San Antonio River Authority has land rights in its district in association with various projects. Some of these land rights are viable economic units that can produce income. Efforts to seek and maintain tenants that support the River Authority's mission are ongoing.
- **San Antonio River Authority Enterprise GIS O&M**
 This effort manages and maintains Enterprise GIS for River Authority users and uses, inclusive of updates/upgrades, further developments, databases, websites, data models, standards, training, user support, trouble shooting and coordination, communications.

Appendix

SAN ANTONIO RIVER AUTHORITY
PROJECT PAGE INDEX
Projects Listed in Alphabetical Order

Alamo Community College District First Responder Wastewater Treatment Plant Project	6-1
Arc Geographical Information System (GIS) Server Implementation Project	10-1
Bexar County Capital Improvement Projects	1-1
Bexar County Flood Warning and Flood Alert Project	9-1
Branch Property Site Development Project	4-1
Calaveras 6 Dam Rehabilitation Project	1-2
Calaveras 8 Dam Rehabilitation Project	1-3
Characterization of Sediment Loads in Lower San Antonio River Project ...	3-1
City Metering for Salatrillo Wastewater Treatment Plant and Retail Project	6-2
Clean Rivers Program 2009 Grant Project.....	3-2
Clean Rivers Program 2011 Grant Project.....	3-3
Cooperating Technical Partners (CTP) Development Project	9-2
Creekwood Water System Improvements Project	6-3
Dam Inundation Zone Study Project.....	8-1
Dam Instrumentation Project	9-3
Digital Data Model Repository (D2MR) Project.....	9-4
Digitizing San Antonio Bay Data Project.....	3-4
Edwards Nueces Feasibility Study Project	9-5
Efforts	7-4
Elmendorf Lake Best Management Practices Project.....	1-4
Emerging Contaminants Project	3-5
Environmental Monitoring System Project	9-6
Estuary Response Project.....	3-6
Flood Debris Cleanup 2012 Project.....	8-2
Goliad County Water Supply Corporation Project	7-1
Graytown Road Wastewater System Development Project.....	6-4
Helton San Antonio River Nature Park Project	4-2
Historical Geographical Information System (GIS) Database Project	10-2
Instream Flows Planning Project	3-7
Instream Flows Study Design & Implementation Project	3-8
Instream Flows Verification Project	3-9
Kenedy Desalination Study Project	7-2
Laboratory Information Management System Upgrade Project.....	3-10
Leon Creek Holistic Watershed Master Plan Project	5-1
Loop 1604 River Access Site Development Project.....	4-3
Martinez II Wastewater Treatment Plant Expansion Project.....	6-5
Medina Dam Improvement Project.....	1-5
Medina River Holistic Watershed Master Plan Project	5-2
Mission Reach Maintenance Facility Project	1-6
Non-Point Runoff Modeling and Best Management Practices Strategies Project	5-3
Olmos Basin Alliance Stormwater Best Management Practices Project.....	5-4

**SAN ANTONIO RIVER AUTHORITY
PROJECT PAGE INDEX
Projects Listed in Alphabetical Order**

Randolph Air Force Base Year 8 (2011) Project	6-6
Randolph Air Force Base Year 9 (2012) Project	6-7
Real Estate Geographical Information System (GIS) Support Project	10-3
Salado Creek Watershed Master Plan Project	5-5
Salatrillo Beltpress Replacement Project	6-8
Salatrillo Collection Wholesale System Inflow and Infiltration Project	6-9
Salatrillo Reuse Project	6-10
San Antonio Bay Ecological Dynamic Simulation (EDYS) Model Development Project	9-7
San Antonio River Authority Stream Monitoring 2011 Project	3-11
San Antonio River Basin Nutrient Loading Survey Project	3-12
San Antonio River Improvement Project Outfalls Assessment Project	5-6
San Antonio River Improvement Program	
Eagleland Reach Project	1-7
Mission Reach Project	1-8
Museum Reach (Park Segment) Project	1-9
Museum Reach (Urban Segment) Project	1-10
SARA Wastewater Collection System Inflow and Infiltration Project	6-11
SARA Wastewater Vulnerability & Security Assessment Project	6-12
Saspanco Paddling Trail River Access Project	4-4
South Central Texas Regional Water Planning Group 2016 Regional Water Plan Fourth Cycle Project	7-3
Stream Restoration Projects	
East Salatrillo Creek Project	5-7
Huebner Creek Project – Leon Valley	5-8
Huebner Creek Project – SAWS	5-9
Support Project	5-10
Upper San Antonio River Holistic Watershed Master Plan Project	5-11
Upper San Antonio River Watershed Protection Plan Revision #1 Project .	3-13
US Geological Survey Coleto Creek Groundwater Surface Water Project	9-8
US Geological Survey Paired Watershed Study Project	9-9
Utilities Supervisory Control & Data Acquisition (SCADA) System Project	6-13
Wastewater Billing and Geographical Information System Assessment Project	10-4
Water Quality Database and Website Interface Project	3-14
Westside Creeks Restoration Project	5-12
Wilson, Karnes, Goliad Floodplain Master Plan Assistance Project	9-10
Witte Center for Rivers Project	2-1



Abbreviations & Acronyms

AFB	–	Air Force Base
BCCIP	–	Bexar County Capital Improvement Program
CRP	–	Clean Rivers Program
DFIRM	–	Digital Flood Insurance Rate Map
EAA	–	Edwards Aquifer Authority
EGIS	–	Enterprise Geographical Information System
FEMA	–	Federal Emergency Management Agency
FWRS	–	Flood Warning and Response System
GIS	–	Geographic Information System
GPD	–	Gallons per Day
GWSW	–	Ground Water Surface Water
IGCR	–	Intergovernmental/Community Relations
MGD	–	Million Gallons per Day
NRCS	–	Natural Resources Conservation Service
PCB	–	Polychlorinated biphenyls
QA/QC	–	Quality Assurance/Quality Control
RFP	–	Request for Proposal
RFQ	–	Request for Qualifications
RO	–	Reverse Osmosis
SACIP	–	San Antonio Capital Improvement Projects
SAR	–	San Antonio River
SARA	–	San Antonio River Authority (the River Authority)
SARIP	–	San Antonio River Improvements Project
SCADA	–	Supervisory Control and Data Acquisition
SCTRWPG	–	South Central Texas Regional Water Planning Group
SR	–	Stream Restoration
TCEQ	–	Texas Commission on Environmental Quality
TWDB	–	Texas Water Development Board
TxDOT	–	Texas Department of Transportation
USACE	–	US Army Corps of Engineers
USGS	–	US Geological Survey
UTI	–	Utilities
VSAP	–	Vulnerability & Security Assessment Project
WRCD	–	Water Resources and Community Development
WSC	–	Water Supply Corporation
WSM	–	Watershed Management
WSO	–	Watershed Operations
WWS	–	Wastewater System
WWTP	–	Wastewater Treatment Plant



References

- Hedgehog
The River Authority is utilizing Jim Collins' book *Good to Great* as a guide to reach a level of greatness to serve its constituents. Jim Collins refers to the Hedgehog Concept as the kind of basic principle that unifies, organizes, and guides all decisions. The idea is to align three intersecting circles that represent three pivotal questions:
 1. What can we be the best in the world at and equally important—what can we not be the best at?
 2. What is the economic denominator that best drives our economic engine?
 3. What are our core people deeply passionate about?
- PMI
Project Management Institute (PMI) is a nonprofit association for the project management profession.

